LPC 16300080 St. Clair Co.
Yvonne Sauget (Trust)
ILD 985073641
SF/HRS

CERCLA
Integrated Site Assessment

Illinois Environmental Protection Agency

2200 Churchill Road
P. O. Box 19276
Springfield, IL 62794-9276

Confidential material may be enclosed.

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1. INTRODUCTION

On September 22, 1992 the Illinois Environmental Protection Agency's Site Assessment Program was tasked by the U.S. Environmental Protection Agency (USEPA) the conduct the site inspection portion of an Integrated Assessment of the Yvonne Sauget (Trust) site in Sauget, Illinois.

The site was initially placed in CERCLIS (Comprehensive Environmental Response, Compensation & Liability Information System) in December of 1987 as a result of a request for discovery action initiated by the Illinois Environmental Agency (IEPA). The site received its initial CERCLA evaluation in September of 1988, when Mr. Tim Murphy of the IEPA completed a formal Preliminary Assessment report. In December 1992, the Illinois Environmental Protection Agency's Site Assessment Program prepared and submitted to the Region V offices of the U.S. Environmental Agency a site inspection work plan for the Yvonne Sauget (Trust) site. The sampling portion of the site inspection was conducted on December 8 & 9, 1992 when the inspection team collected a total of sixteen soil samples.

The purpose of the Integrated Assessment has been developed from USEPA directive and guidance information which outlines Site Assessment program strategies. The information states:

The Integrated Assessment will be conducted to: 1) Collect data which would satisfy both site assessment and remedial program activities. This would incorporate hazardous waste, surface water, air, and groundwater concerns. 2) The objectives of the assessment are to determine whether time or non time critical removals are warranted and to determine whether the site is National Priorities List (NPL) caliber. If the determination is made that the site is NPL caliber, additional data will likely be needed to complete the assessment. A sampling plan to

accommodate removal and site assessment needs, as well as initial remedial needs should be developed. 3) Determination of site sampling needs will be accomplished with an understanding to assure adequate data for the removal assessment and the preparation of the Hazard Ranking System (HRS) score as well as the need for possible initial sampling for the remedial investigation. Based on the preliminary HRS score and removal program information, the site will either be designated as No Further Action (NFA), or carried forward as an NPL listing candidate. Sites that are designated NFA or deferred to other statutes are not candidates for an integrated Assessment. 4) Upon completion of the data gathering, there will be a determination of whether the site should be forwarded within the Superfund process, either through the remedial or removal programs.

The initial assessment of a site as it enters the Superfund program within Region V will be conducted by either a Regional On-Scene Coordinator (OSC) and a Site Assessment Manager (SAM) or by State personnel. An OSC and a SAM will be assigned foe all new sites entering the Regional Superfund program. If an emergency is found to occur, USEPA or state emergency removal staff will be immediately contacted for action. If the site needs further Superfund activities, a Site Assessment Team (SAT), comprised of the State, the SAM, the Regional Project Manager (RPM), and an OSC will be formed. As necessary, additional data can be generated for the SAT to make a recommendation to the Regional Decision Team (RDT) for further possible action.

The Integrated Assessment will address all the data requirements of the revised HRS using field screening and NPL level Data Quality Objectives (DQOs) prior to data collection. It will also provide needed data in a format to support remedial investigation workplan development. Only sites that appear to score high enough for NPL listing and that have not been deferred to another authority will receive an Integrated Assessment.

USEPA Region 5 offices have requested that the Illinois Environmental Protection Agency identify sites during the Integrated Assessment that may require a CERCLA removal action to remediate an immediate threat to human health and/or the environment. Before the initiation of field activities, a Removal Integrated Site Evaluation (RISE) form pertaining to site specific operations and waste characteristics was completed and forwarded to Region 5 offices.

During the field investigation portion of the Integrated Assessment, a number of environmental samples were collected from the facility, and at points of potential pollutant migration. An analysis of these samples showed that established CERCLA Removal Action Levels (RALs)

were not exceeded in any sample collected during the Integrated Assessment sampling event. Therefore, a Region 5 On-Scene Coordinator (OSC) was not assigned to Yvonne Sauget (Trust)

During the Integrated Assessment, a number of other Removal Action Criteria were also evaluated. These criteria included the presence of: contaminated drinking water supplies, hazardous substances stored in containers that may pose a threat of release, high level contamination at or near the surface in soils that may migrate, and a threat of fire or explosion (refer to Appendix H for a complete listing of these factors)

Based on the information gathered over the course of the formal Integrated Assessment, the author has concluded that Yvonne Sauget (Trust) does not pose enough of a threat to human health and/or the environment to warrant a time or non-time critical CERCLA removal action.

It should be stressed that the CERCLA removal status can be re-evaluated at such time that additional information suggests that the facility may be posing a threat to human health and/or the environment.

2. SITE BACKGROUND

2.1 INTRODUCTION

This section includes information obtained over the course of the formal CERCLA site inspection investigation, and previous Illinois Environmental Protection Agency activities involving this site.

2.2 SITE DESCRIPTION

Yvonne Sauget (Trust), also known as Site K, consists of a sand pit that has been filled with unknown materials. The site is an estimated two and a half acres in size. The Yvonne Sauget site is located northeast of the intersection of the streets of Queeny and Ogden in Sauget, Illinois. Currently, situated on the majority of the property is a park designated specifically for the residents of Sauget. Land abutting the northwest perimeter of the park is also a portion of the Yvonne Sauget (Trust) site. Currently, this part of the site is occupied by MTS, Inc. MTS, Inc. is a trucking business owned by Paul Sauget who is also the mayor of the Village of Sauget. To the southwest of the site are residential homes. To the far northeast of the site (Trust) is a ball diamond. East and southeast of the site is vacant land. (Please refer to Figure 2-1 and 2-2.)

2.3 SITE HISTORY

In 1988, Ecology and Environment, Inc. (E&E) completed an investigation of several potential hazardous waste sites in the area of the Village of Sauget, Illinois. E&E made use of aerial photographs to observe a pit, now referred to as the Yvonne Sauget (Trust) site or Site K.

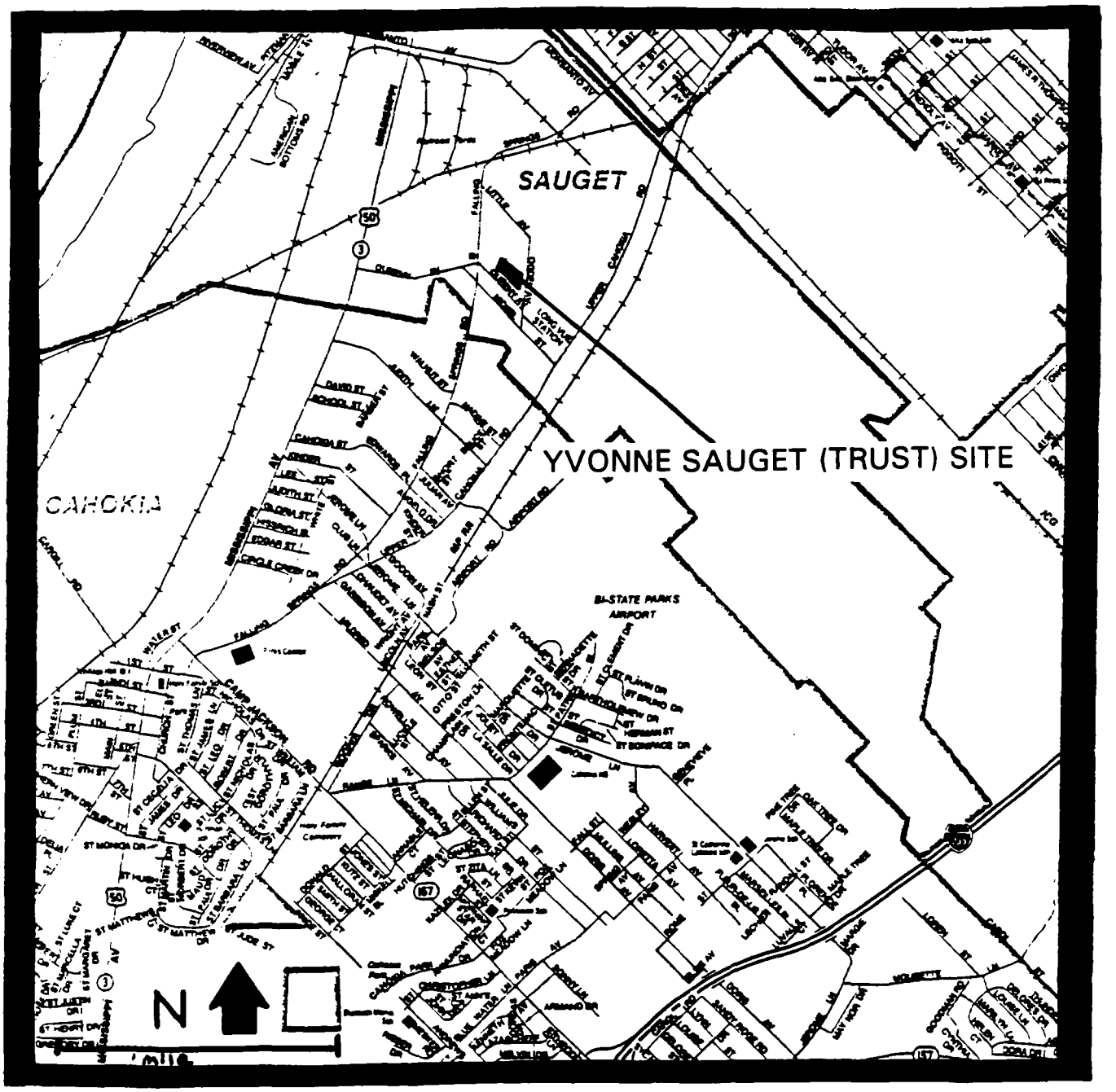
E&E used a series of aerial photographs to observe the waste disposal activities that took place

at the Yvonne Sauget (Trust) site. With the aid of a 1950 aerial photograph, E&E observed that excavations at the Yvonne Sauget (Trust) site began in the late 1940's. In 1955, the site remained about the same. A 1962 aerial photograph showed that the pit had been filled. An aerial photograph taken in 1973 reveals the presence of another larger pit situated in the same location as the previous one at the Yvonne Sauget (Trust) site. E&E observed from a 1978 aerial photograph that once again, the pit had been filled. (Please refer to Figures 2-3 through 2-10 for available aerial photographs).

The materials placed in the pit are unknown. Part of E&E's investigation included collected subsurface samples from three twenty-foot borings. In their report, E&E noted that although no waste materials were found, toward the bottom of each boring were black-stained soils. These samples revealed the presence of two volatiles, 17 semivolitiles, elevated concentrations of tin, mercury and cyanide and pesticide and PCB (polychlorinated biphenyl) contaminants such as benzo(a) anthracene, chrysene, benzo(b)fouoranthene, benzo(a)pyrene, Aroclor 1242, Aroclor 1248 and Aroclor 1250; all of which are carcinogens.

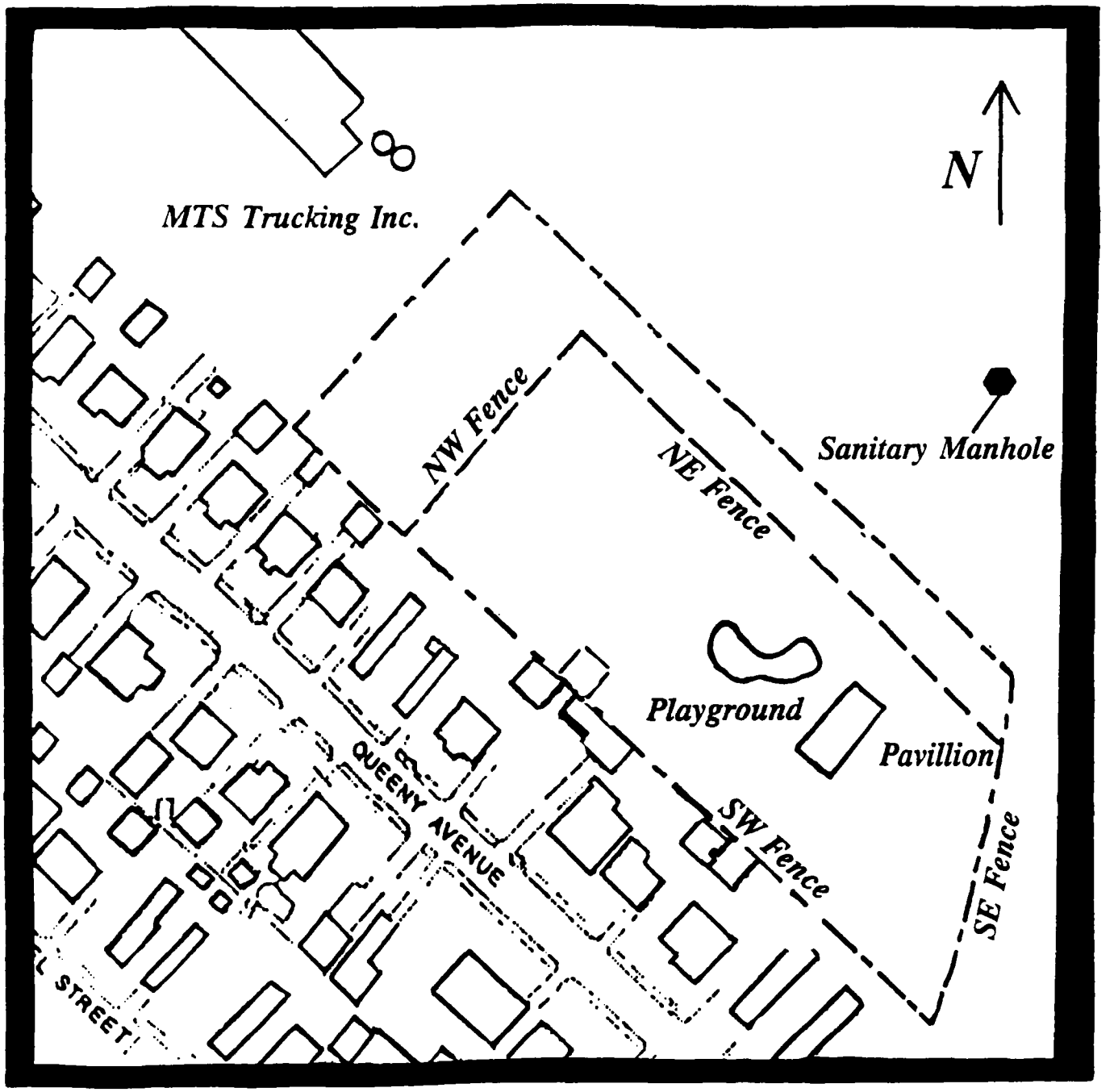
2.4 APPLICABILITY OF OTHER STATUES

There are no known records indicating that the Yvonne Sauget (Trust) site is or ever has been listed as a facility, generator, etc., permitted or not, under any environmental statute including the Resources Conservation and Recovery Act (RCRA), the Atomic Energy Act (AEA), Toxic Substances Control Act (TSCA), Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) or the Uranium Mill Tailings Radiation Control Act (UMTRCA). This is due to the enactment of environmental regulatory controls postdating the time at which this site was in operation.



YVONNE SAUGET (TRUST)

Figure 2-1



YVONNE SAUGET (TRUST)

Not to Scale

Yvonne Sauget (Trust) Site — – — –
Village of Sauget Mini Park — — — —

Figure 2-2

about the same. A 1962 aerial photograph showed that the pit had been filled. An aerial photograph taken in 1973 reveals the presence of another larger pit situated in the same location as the previous one at the Yvonne Sauget (Trust) site. E&E observed from a 1978 aerial photograph that once again, the pit had been filled. (Please refer to Figures 2-3 through 2-10 for available aerial photographs.)

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SOURCE: IDOT, 1992

1959 AERIAL PHOTOGRAPH
FIGURE 2-3

SOURCE: IDOT, 1992

1962 AERIAL PHOTOGRAPH
FIGURE 2-4

SOURCE: IDOT, 1992

1970 AERIAL PHOTOGRAPH
FIGURE 2-5

SOURCE: IDOT, 1992

1973 AERIAL PHOTOGRAPH
FIGURE 2-6

SOURCE: IDOT, 1992

1976 AERIAL PHOTOGRAPH
FIGURE 2-7

SOURCE: IDOT, 1992

1976 AERIAL PHOTOGRAPH
FIGURE 2-8

SOURCE: IDOT, 1992

1986 AERIAL PHOTOGRAPH
FIGURE 2-9

SOURCE: IDOT, 1992

1991 AERIAL PHOTOGRAPH
FIGURE 2-10

3. SITE INSPECTION ACTIVITIES AND RESULTS

3.1 INTRODUCTION

This section outlines procedures utilities and observations made during the CERCLA site inspection conducted at the Yvonne Sauget (Trust) site. Individual subsections address the reconnaissance inspection, site representative interview, field sampling procedures, analytical and key samples summary. The site inspection for Yvonne Sauget (Trust) site was conducted in accordance with the site inspection work plan which was developed and submitted to the USEPA Regional Offices prior to the initiation of files activities.

The US Environmental Protection Agency's Potential Hazard Waste Site Inspection Report (Form 2070-13) for the Yvonne Sauget (Trust) site is located in Appendix B of this report.

3.2 RECONNAISSANCE INSPECTION

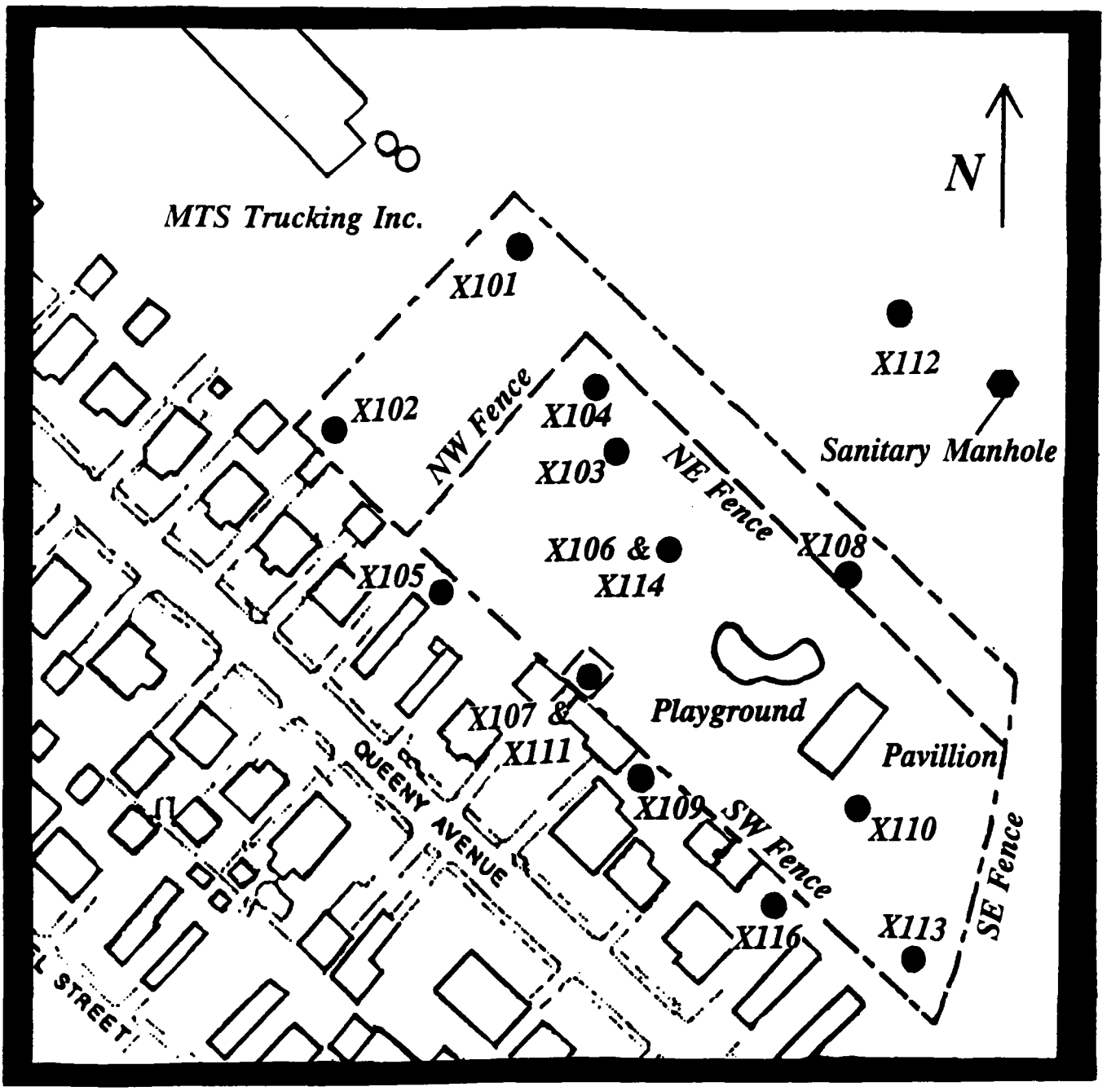
On November 2, 1992, a reconnaissance visit to the Yvonne Sauget (Trust) site was conducted by Sheila Murphy, project manager, and Kim Nika. During the reconnaissance inspection it was observed that the majority of the site consisted of a village park. To the north northwest of the park and still part of the Yvonne Sauget (Trust) site was MTS, Inc., apparently a trucking company. Photographs were taken of the park. (Please refer to Appendix D for these photographs).

It was during the reconnaissance inspection that IEPA employees encountered a man who told them they were on private property and, thus, trespassing. S. Murphy and K. Nika identified themselves as employees of the Illinois Environmental Protection Agency. Although the man

refused to give his name at this time, it was later revealed that he was Paul Sauget.

3.3 SITE REPRESENTATIVE INTERVIEW

On December 8 and 9, 1992, the IEPA sampling team, consisting of Ken Corkill, Sheila Murphy, Kim Nika and Greg Spencer and the drill rig team, consisting of Paul Mason, Bob Mathis and Bill Walkenback, and geologist Sherri Otto arrived at the Yvonne Sauget (Trust) site at approximately 10:40 AM. At this time, S. Murphy and G. Spencer went to the village hall to have someone unlock the gate to the park and to obtain a copy of the park's sprinkler system plan. No one was available at the village hall to assist the IEPA personnel. Upon returning to the site, Stan Black, with the IEPA and Paul Sauget and Mike Williams, both with the Village of Sauget, had arrived. M. Williams was assigned the task of observing the sampling activities. P. Sauget verbally gave IEPA personnel permission to access the Yvonne Sauget (Trust) property as long as no damage was done. P. Sauget was adamant in his statement that at the first sign of property damage, he would have the IEPA personnel arrested. Before any vehicles were driven into the park, the ground of the park was surveyed. Several ruts at different locations in the park were observed and documented with photographs. (Please refer to Appendix D).



YVONNE SAUGET (TRUST)

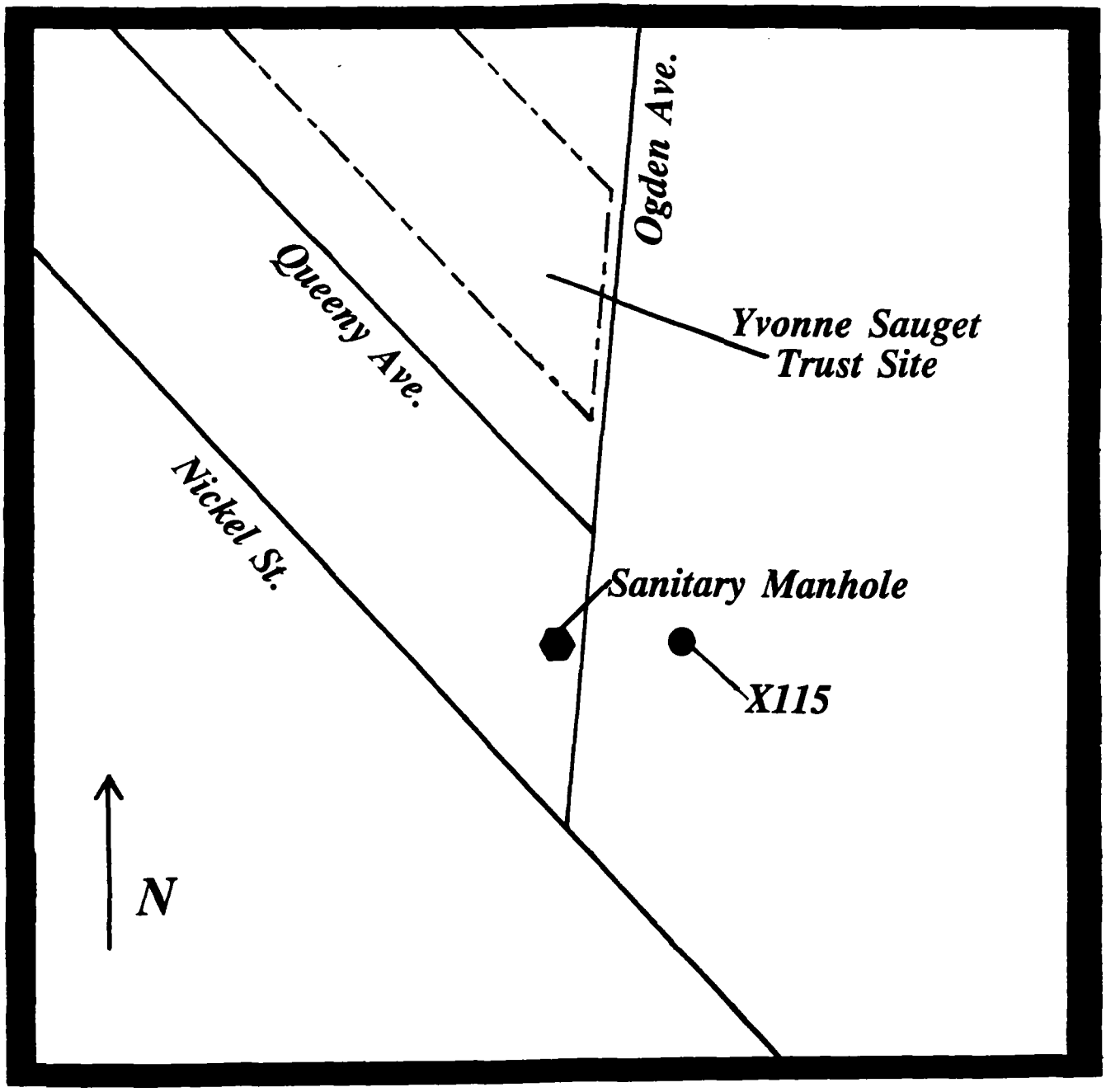
SOIL SAMPLE MAP

Not to Scale

Yvonne Sauget (Trust) Site — - — - —

Village of Sauget Mini Park — — — —

Figure 3-1



YVONNE SAUGET (TRUST)

BACKGROUND SOIL SAMPLE MAP

Not to Scale

Yvonne Sauget (Trust) Site — — — —

Figure 3-2

3.4 SOIL SEDIMENT SAMPLING

On December 8 and 9, 1992, Illinois Environmental Protection Agency (IEPA) personnel (with the assistance of the drill rig team) collected a total of sixteen soil/sediment samples (see Figures 3-1 and 3-2 for all sampling locations) on site and in the proximity of the site within the areas of suspected contamination. The main objective of these soil/sediment samples was to determine if any USEPA Target Compound List (TCL) contaminants are present at the site or at potential targets of concern. (The Target Compound List n provided in Appendix C of this report.) The following table details individual samples with their locations, depths and physical appearances. (Refer to the analytical data in Appendix I for detection limits associated with each sample point).

Table 3-1 Soil Sample Descriptions

X101	10"-15"	Moist, dark grey clay	East of MTS, Inc.'s main building
X102	18"-24"	1st 12":moist dark grey-black clay; 2nd 12": black tan clay	29' NE of park's SW fence & 115' NW of NW fence
X103	12.5'-17.5'	Wet dark grey to black coarse sand	39.5'W of NE fence & 53'7" S of NW fence
X104	18"-24"	1st 12":light tan sandy clay; 12"-24" dark grey to black silty clay with concrete, brick, debris and gravel	8'10" SSE of NW fence, 11' SW of NE fence

X105	18"	Moist dark grey to black silty clay with small cinders	Residential backyard; 1453 Queeny; 20'9" SW of park 's SW fence, 9'8" E of the most E corner of trailer home at 1451 Queeny
X106	12.5'-15'	Very, wet black fill sand, gravel, asphalt and wood	Center of park; 64'4" E of SW fence, 111' 6" NW of most NE corner park pavilion
X107	18"-24"	Moist tan to black mottled silty clay	Directly beneath W feet of power pole along park's SW fence; 6.5' SE of NW leg & 3.5' NE of SW leg
X108	10'-12.5'	Dark grey clay	11'4" N & 71' NW of electrical pole located in the SE corner of the park
X109	18"	Moist grey to black silty clay w/some cinders	Residential backyard: (1457 &) 1459 Queeny; 20'5" SW of SW park fence, 15'7" SE of most E corner of residential workshop(old garage)
X110	12"-18"	Tan friable silty clay	54'9" E of SW park fence, 18'2" S of most southern corner of park pavilion
X111	18"-24"	Moist tan to black mottled silty clay	Refer to X107

X112	4"-8"	Moist dark grey	S of ball diamond & E of park; 184'2" W of water main standpipe, 75' N of sewer main
X113	12"-18"	Light brown to tan clay, somewhat dry	Extreme S corner of park; 13.5' N of most S corner of the park, from most S fence post
X114	17.5'-20'	Dark grey medium sand to gravel	Center of park; 64'4" E of SW fence, 111'6" NW of most NE corner of park pavilion
X115	18"	Light tan silty sand	Vacant land E of Ogden 68' 4" E of sanitary sewer manhole between Nickel & Queen , 111'2" SSW of SW corner of tennis court
X116	18"-24"	Tan to dark grey silty clay	Residential backyard; 1463 Queeny; 8" NW of SE fence, 7' S of NE fence(runs parallel w/ SW park fence

Sample X101 was collected with the use of a shovel. The rest of the above soil/sediment samples were collected with stainless steel trowels for shallow samples and drill barrels and augers for the deep borings. Decontamination of the trowels was done at the IEPA's warehouse prior to and following the sampling portion of the SSI. Decontamination procedures include the cleaning of the equipment with liquid alconex and warm water, rinsing with tap water, rinsing

with a 50% distilled water mixture, rinsing with warm tap water and a final rinsing of distilled water. The trowels and shovel dried on paper towels and were wrapped in aluminum foil.

3.5 GROUNDWATER SAMPLING

There are no known groundwater wells in the vicinity of the Yvonne Sauget (Trust) site, and therefore, no groundwater samples were taken during the CERCLA site inspection for the Yvonne Sauget (Trust) site.

3.6 SURFACE WATER SAMPLING

Approximately one quarter of a mile west of the Yvonne Sauget (Trust) site is an intermittent stream known as Dead Creek. About one and a half miles further west is the Mississippi River. No surface water samples were collected during the December 8 and 9, 1992 CERCLA site inspection.

3.7 ANALYTICAL RESULTS

This section includes a summary of the analytical results of samples collected during the CERCLA site inspection portion of the Integrated Assessment conducted at the Yvonne Sauget (Trust) site in Sauget, Illinois. Chemical analysis of soil/sediment samples collected by IEPA personnel revealed quantified and estimated values of volatiles, semi-volatiles, pesticides, PCBs, heavy metals and common laboratory artifacts. A quality assurance/quality control review was conducted by the Quality Assurance Section of the Division of Laboratory Services at the IEPA. Please refer to Table 3-2 for the sample summary, chemical analysis are provided in Appendix I.

3.8 KEY SAMPLES

Table 3-3 identifies those samples taken during the CERCLA site inspection for the Yvonne Sauget (Trust) site which were found to contain contaminants at a level significantly higher than the background concentrations. No Removal Action Levels were exceeded.

Acetone, although a common laboratory artifact, was the only volatile that was found significantly over background levels. Acetone was detected in samples X103 and X114.

Levels of semi-volatiles elevated significantly over background were taken from the park and found in samples X104, X106, and X114. These include Phenanthrene, Fluoranthene, Pyrene, Chrysene, Benzo(k)fluoranthene and Banzo(g,h,i)perylene. Of these contaminants, chrysene and Benzo(k)flouranthene are carcinogens.

Yvonne Sauget (Trust)
ILD #: 982073611

TABLE 3-3
KEY SAMPLES

SAMPLING POINT / PARAMETER	X101 12-9-92	X102 12-9-92	X103 12-8-92	X104 12-9-92	Target X105 12-9-92	X106 12-9-92	X107 12-9-92	X108 12-8-92	Target X109 12-9-92	X110 12-9-92	X111 12-9-92	X112 12-8-92	X113 12-8-92	X114 12-9-92	Soil Background X115 12-9-92	Target X116 12-9-92
VOLATILES	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
Acetone	--	--	190.0 J	--	--	--	--	--	--	--	--	--	--	41.0 J	--	--
SEMIVOLATILES	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
Phenanthrene	--	--	--	--	--	470.0 J	--	--	--	--	--	--	--	--	--	--
Fluoranthene	--	--	--	460.0 J	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	--	--	--	520.0 J	--	870.0 J	--	--	--	--	--	--	--	--	--	--
Chrysene	--	--	--	--	--	470.0 J	--	--	--	--	--	--	--	490.0 J	--	--
Benzo(k)fluoranthene	--	--	--	550.0 J	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	--	--	--	--	--	590.0 J	--	--	--	--	--	--	--	--	--	--
PESTICIDES	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
Dieldrin	--	--	7.30 J	210.0 PJ	--	--	--	8.60 JP	--	--	--	--	--	--	--	6.50 PJ
4,4'-DDE	--	--	23.0 PJ	560.0 PDJ	12.0 J	--	8.20 J	--	28.0 J	--	7.90 J	--	--	--	--	36.0 PJ
Endrin	--	--	--	--	--	17.0 JD	--	--	--	--	--	--	--	--	--	--
Endosulfan II	--	--	12.0 P	240.0 PD	7.60 P	--	--	--	8.10 P	--	4.10 JP	--	--	--	--	15.0 P
Endosulfan sulfate	--	--	36.0 P	--	--	--	--	--	--	--	--	--	--	16.0 JD	--	--
4,4'-DDT	8.5 PJ	4.60 PJ	9.30 PJ	540.0 PDJ	12.0 PJ	39.0 JD	9.70 PJ	7.0 PJ	37.0 PJ	--	11.0 PJ	--	--	43.0 DJ	--	70.0 PJ
Endrin Ketone	--	--	4.60 PJ	--	--	--	--	--	5.60 PJ	--	--	--	--	--	--	--
Endrin aldehyde	11.0	--	--	--	13.0 P	--	7.70 P	--	--	--	--	--	--	--	--	--
alpha-Chlordane	--	--	--	--	--	28.0 D	--	--	--	--	--	--	--	--	--	--
gamma-Chlordane	--	--	--	--	--	22.0 JPD	--	--	--	--	--	--	--	6.90 JPD	--	--
Aroclor-1016	--	--	--	1200.0 D	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221	--	--	--	310.0 JPD	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242	--	--	330.0 P	--	--	840.0 JPD	--	420.0	80.0 P	37.0 JP	--	--	--	--	--	39.0 JP
Aroclor-1254	--	--	360.0 P	--	130.0 P	360.0 JPD	--	280.0 P	230.0 P	--	--	--	--	540.0 PD	--	220.0 P
Aroclor-1260	93.0	--	540.0 P	4000.0 PDC	130.0 P	440.0 JD	72.0 P	110.0 P	160.0 P	--	77.0 P	--	--	360.0 JPD	--	350.0 P
INORGANICS	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Aluminum	--	--	--	--	--	--	21700.0	--	--	--	21500.0	20300.0	--	--	--	--
Arsenic	8.60 J	7.80 J	--	8.70 J	10.40 J	8.10 J	9.20 J	--	7.70 J	--	8.90 J	7.50 J	--	--	--	8.70 J
Cadmium	2.10	1.40	--	1.20	--	1.30	1.80	--	8.50	--	2.80	2.80	--	--	--	2.40
Calcium	--	--	--	56800.0	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	--	--	79.30	--	--	--	--	--	--	--	--	--	--	--	--
Copper	41.90	46.20	--	53.90	28.60	--	43.60	--	85.0	--	45.30	78.70	--	--	--	36.30
Lead	56.30	39.40	80.8	228.0	28.40	56.0	85.60	--	136.20 J	--	91.1	66.10	--	--	--	81.40
Manganese	--	--	--	--	--	--	--	--	--	--	960.0 J	--	--	--	--	--
Selenium	0.42 BJ	0.22 BJ	--	0.24 BJ	0.15 BJ	0.71 BJ	0.18 BJ	--	0.21 BJ	--	0.18 BJ	0.29 BJ	--	--	--	0.17 BJ
Silver	--	--	--	--	--	--	--	--	--	--	2.60	--	--	--	--	--
Thallium	0.260 B	0.24 B	--	0.15 BJ	0.27 B	--	0.25 B	--	0.16 BJ	--	0.25 B	0.21 B	--	--	--	0.21 B
Zinc	195.0	180.0	--	2110.0	118.0	142.0	300.0	--	2370.0	--	303.0	263.0	--	--	--	221.0
Cyanide	--	--	--	--	--	--	--	--	--	--	--	--	21.0	--	--	--
TENTATIVELY IDENTIFIED COMPOUNDS	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
1-ETHYLIDENE-1H-INDENE	--	--	--	--	--	--	--	--	--	120.0 JN	--	--	--	--	--	--

Yvonne Saugel (Trust)
ILD #: 982073611

TABLE 3-3
KEY SAMPLES

SAMPLING POINT / PARAMETER	X101 12-9-92	X102 12-9-92	X103 12-8-92	X104 12-9-92	Target X105 12-9-92	X106 12-9-92	X107 12-9-92	X108 12-8-92	Target X109 12-9-92	X110 12-9-92	X111 12-9-92	X112 12-8-92	X113 12-8-92	X114 12-9-92	Soil Background X115 12-9-92	Target X116 12-9-92
VOLATILES	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
Acetone	--	--	190.0 J	--	--	--	--	--	--	--	--	--	--	41.0 J	--	--
SEMIVOLATILES	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
Phenanthrene	--	--	--	--	--	470.0 J	--	--	--	--	--	--	--	--	--	--
Fluoranthene	--	--	--	460.0 J	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	--	--	--	520.0 J	--	970.0 J	--	--	--	--	--	--	--	--	--	--
Chrysene	--	--	--	--	--	470.0 J	--	--	--	--	--	--	--	490.0 J	--	--
Benzo(k)fluoranthene	--	--	--	550.0 J	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	--	--	--	--	--	560.0 J	--	--	--	--	--	--	--	--	--	--
PESTICIDES	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
Dieldrin	--	--	7.30 J	210.0 PJ	--	--	--	5.60 JP	--	--	--	--	--	--	--	6.50 PJ
4,4'-DDE	--	--	23.0 PJ	560.0 PDJ	12.0 J	--	6.20 J	--	28.0 J	--	7.90 J	--	--	--	--	38.0 PJ
Endrin	--	--	--	--	--	17.0 JD	--	--	--	--	--	--	--	--	--	--
Endosulfan II	--	--	12.0 P	240.0 PD	7.60 P	--	--	--	6.10 P	--	4.10 JP	--	--	--	--	15.0 P
Endosulfan sulfate	--	--	36.0 P	--	--	--	--	--	--	--	--	--	--	16.0 JD	--	--
4,4'-DDT	8.5 PJ	4.60 PJ	9.30 PJ	540.0 PDJ	12.0 PJ	39.0 JD	9.70 PJ	7.0 PJ	37.0 PJ	--	11.0 PJ	--	--	43.0 DJ	--	70.0 PJ
Endrin Ketone	--	--	4.60 PJ	--	--	--	--	--	5.60 PJ	--	--	--	--	--	--	--
Endrin aldehyde	11.0	--	--	--	13.0 P	--	7.70 P	--	--	--	--	--	--	--	--	--
alpha-Chlordane	--	--	--	--	--	28.0 D	--	--	--	--	--	--	--	--	--	--
gamma-Chlordane	--	--	--	--	--	22.0 JPD	--	--	--	--	--	--	--	6.90 JPD	--	--
Aroclor-1016	--	--	--	1800.0 D	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1221	--	--	--	310.0 JPD	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor-1242	--	--	330.0 P	--	--	940.0 JPD	--	420.0	80.0 P	37.0 JP	--	--	--	--	--	39.0 JP
Aroclor-1254	--	--	360.0 P	--	130.0 P	360.0 JPD	--	260.0 P	230.0 P	--	--	--	--	540.0 PD	--	220.0 P
Aroclor-1260	93.0	--	540.0 P	4000.0 PDC	130.0 P	440.0 JD	72.0 P	110.0 P	160.0 P	--	77.0 P	--	--	360.0 JPD	--	350.0 P
INORGANICS	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM
Aluminum	--	--	--	--	--	--	21700.0	--	--	--	21500.0	20300.0	--	--	--	--
Arsenic	8.60 J	7.60 J	--	8.70 J	10.40 J	8.10 J	9.20 J	--	7.70 J	--	8.90 J	7.50 J	--	--	--	6.70 J
Cadmium	2.10	1.40	--	1.20	--	1.80	1.80	--	8.60	--	2.80	2.80	--	--	--	2.40
Calcium	--	--	--	58600.0	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	--	--	79.30	--	--	--	--	--	--	--	--	--	--	--	--
Copper	41.90	46.20	--	53.90	28.80	--	43.80	--	85.0	--	45.30	78.70	--	--	--	38.30
Lead	58.30	39.40	80.8	226.0	28.40	58.0	88.60	--	138.20 J	--	91.1	66.10	--	--	--	81.40
Manganese	--	--	--	--	--	--	--	--	--	--	960.0 J	--	--	--	--	--
Selenium	0.42 BJ	0.22 BJ	--	0.24 BJ	0.15 BJ	0.71 BJ	0.18 BJ	--	0.21 BJ	--	0.18 BJ	0.29 BJ	--	--	--	0.17 BJ
Silver	--	--	--	--	--	--	--	--	--	--	2.60	--	--	--	--	--
Thallium	0.260 B	0.24 B	--	0.15 BJ	0.27 B	--	0.25 B	--	0.18 BJ	--	0.25 B	0.21 B	--	--	--	0.21 B
Zinc	195.0	160.0	--	2110.0	118.0	142.0	300.0	--	2370.0	--	303.0	283.0	--	--	--	221.0
Cyanide	--	--	--	--	--	--	--	--	--	--	--	--	21.0	--	--	--
TENTATIVELY IDENTIFIED COMPOUNDS	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB	PPB
1-ETHYLIDENE-1H-INDENE	--	--	--	--	--	--	--	--	--	120.0 JN	--	--	--	--	--	--

Pesticides and PCBs, several of which are cancer causing compounds, were detected at significant levels in thirteen of the sixteen soil/sediment samples. These contaminants were detected in both shallow and deep samples. Pesticides and PCBs were detected in samples X103, X104, X106, X110, and X114 taken from the park. Unlike the volatiles and semi-volatiles, pesticides and PCB contamination were detected not only on site, but also in samples derived from neighboring backyards. The contaminated samples taken from the residential are X105, X109, and X116. For a review of all contaminants detected in samples taken during the sampling portion of the Integrated Assessment, the reader is referred to Table 3-2 for the Sample Summary Table. (Table 3-2 can also be found at the front of Appendix I).

4. IDENTIFICATION OF SOURCES

4.1 INTRODUCTION

This section discusses the hazardous waste source which has been identified at this site during the initial stages of the CERCLA site investigation.

Information concerning the size, volume and waste composition of each source has been derived throughout the initial Site Assessment and subsequent site inspection sampling action. It should be pointed out however, that the total number and nature of the sources may be subject to change. As the site progresses through the CERCLA site investigation program and receives further investigation. The Yvonne Sauget (Trust) site has one source that can be identified and used of HRS scoring purposes. This source is contaminated soil.

4.2 CONTAMINATED SOIL

In correlation to the soil samples collected during the December 8 and 9, 1992 sampling of the Yvonne Sauget (Trust) site, analytical results indicate that the soil materials that make up the site are contaminated with hazardous substances. These hazardous constituents were detected in soils from the Sauget Mini-Park, on land to the north northwest of the park but still considered on-site (MTS, Inc.), land abutting the park along the park's northeast fence and three neighboring residential yards. Contaminated soils were found as shallow as 10 inches deep and as deep as 20 feet deep. There is no containment for this source. As previously mentioned, the site is an estimated two and a half acres in size.

Aerial photographs indicate that operations at the site began in the late 1940's and remained

steady until sometime between 1976 and 1978. An aerial photograph taken January of 1986 shows that the land where the pit had been located for approximately 25 years had been built up to adjacent topography and had four trailer homes located on it. An aerial photograph taken in December of 1991 shows that the trailer homes had been removed and the Sauget Mini-Park had been built on a large portion of the site.

Analysis of soil samples obtained during the site inspection portion of he Integrated Assessment conducted st Yvonne Sauget revealed elevated levels of contaminants at the site. These hazardous constituents were detected in shallow samples and deep borings. Contaminated shallow samples which as X101, X102, X104, X107, X110, and X111 would suggest that the materials used to fill the hazardous materials. Please note, the pesticide and PCB contaminants found in the shallow samples were also found in the deep samples.

During the sampling of the X114, which went to a depth of 20 feet, drilling went beyond fill material. The contaminated deep samples are an indication of the materials present in the pit during the years of operation. Considering the time period, the lack of environmental concern and/or lack of awareness of the potential damage that hazardous materials can cause to the environment, and the appearance of operations from the aerial photographs, wastes were allowed to accumulate in the ground with little or no clean-up attempted. Due to these practices and the analytical data derived from the site sampling, it appears that contaminated soils still exist at the site.

5. MIGRATION PATHWAYS

5.1 INTRODUCTION

The CERCLA Site Assessment Program identifies three migration pathways and one exposure pathway by which hazardous substances may pose a threat to human health and/or the environment. Consequently, sites are evaluated on their known or potential impact to these four pathways. The pathways evaluated are groundwater migration, surface water migration, soil exposure and air migration.

This section presents and discusses information collected during the site inspection of the Yvonne Sauget (Trust) site, also, known as Site K. This information, together with information documented in other sources, will be utilized in analyzing the site's impact on the four pathways and the various human and environmental targets within the established target distance limits.

Discussions of the pathways will include pathway descriptions, contaminant sources, and targets, such as human populations and endangered species, and other sensitive environments.

5.2 GROUNDWATER PATHWAY

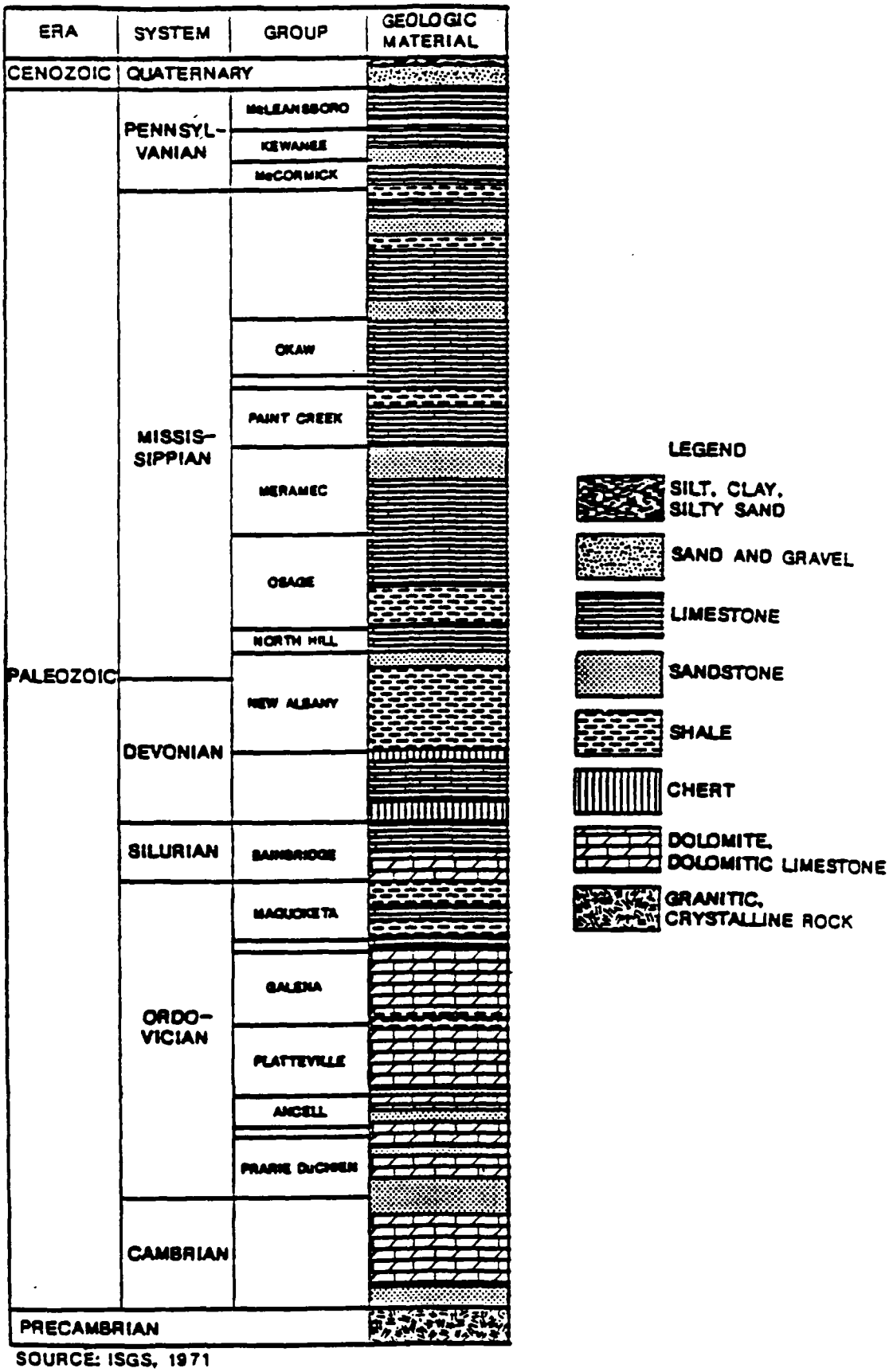
The Yvonne Sauget (Trust) site is located is what is known as the American Bottoms. The uppermost bedrock formations found in the area of the site consist of glacial outwash and unconsolidated alluvium. The two main bedrock formations in the area of the site are the St. Genevieve and St. Louis made up of limestones. According to Ecology and Environment, the St. Genevieve and St. Louis limestone are a part of the Mississippian System. The Mississippian

System can be found lying beneath the Mississippian. Limestone, sandstone and shale are incorporated in the Devonian System. Underneath the Devonian System is the Silurian System which contains several layers of limestone. The Ordovician System is located below the Silurian System. The Ordovician System consists of a variety of formations such as sandstone, limestone, dolomite and shale. Under the latter systen is the Cambrian-Age sandstone, limestone, dolomite and shale. The deepest formation known is the Precambrian formation which contains granitic, crystalline rock. (Please refer to Figure 5-1.)

In their study at the Yvonne Sauget (Trust) site, E&E completed 20 foot boring to determine the makeup of the materials at the site. E&E reported to determine the makeup of the materials at the site. E&E reported that 10 to 15 feet of fill material made up of brown silty clay, sand and rock or pieces of brick were established above discontinuous layers of fine to coarse sand and silty clay. (Please refer to figure 5-2.) E&E noted that waste materials were not directly observed but that toward the bottom of each boring the soils were stained black. This was, also, the case for the deep borings collected during the site inspection. Black stained fill material was observed in samples X104, X106, and X114. (Refer to Appendix F for the boring logs.) E&E reached water at seven to ten feet below the surface for each boring. This coincides with the borings collected by the IEPA. During the CERCLA site inspection, the materials in the deep boring were found to be wet starting at the depth of 11 feet.

No groundwater samples were collected during the December 8 and 9, 1992 inspection of the Yvonne Sauget (Trust) site. The groundwater pathway will not be evaluated for the Yvonne Sauget (Trust) site. Although groundwater is found at the shallow depth of approximately 10

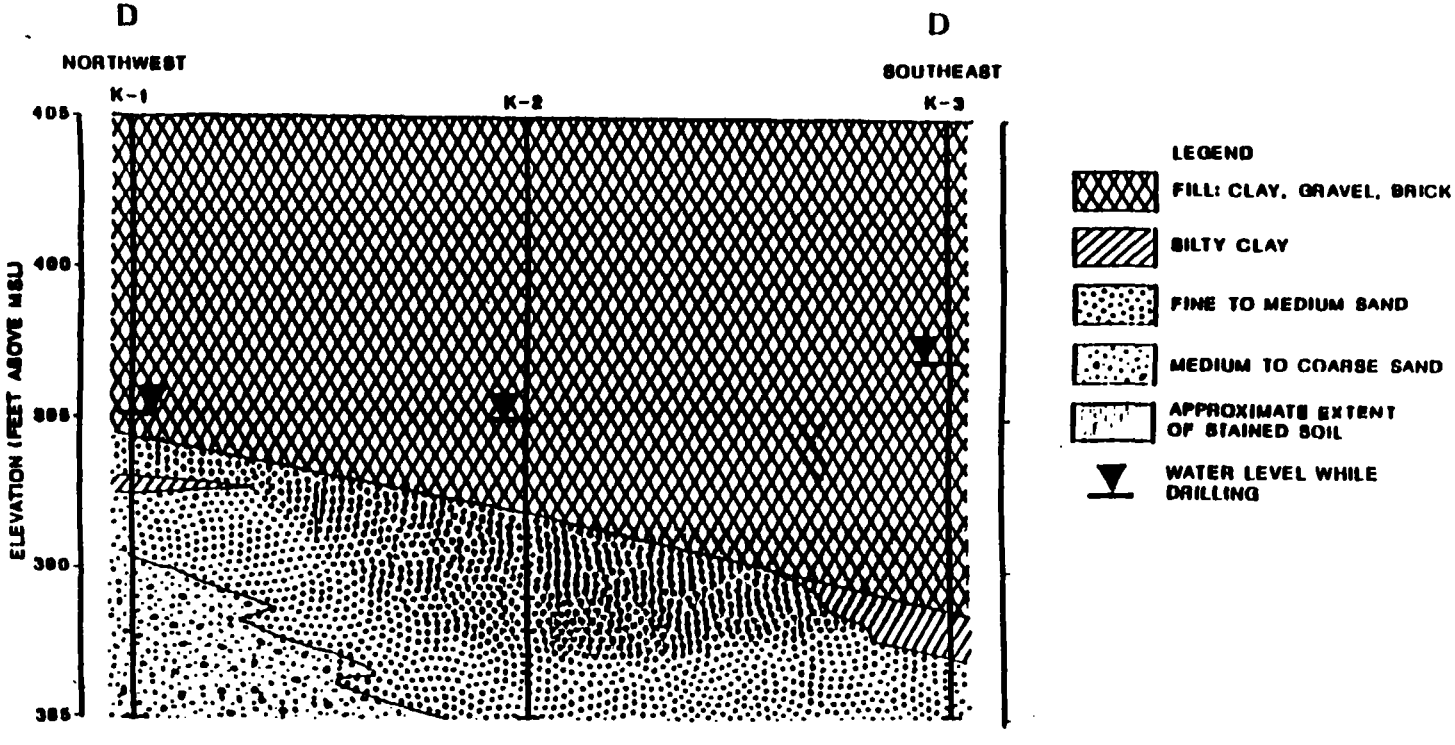
feet, there are no known groundwater wells in use within a four-mile radius of the site. Drinking water in the neighboring area of the Yvonne Sauget (Trust) site is derived for the Mississippi River.



SOURCE: ISGS, 1971

Generalized Geologic Column For South-Central Illinois

Figure 5-1



SOURCE: Ecology and Environment, Inc., 1988.

Generalized Geologic Cross Section

Figure 5-2

5.3 SURFACE WATER PATHWAY

Approximately one quarter of a mile west of the Yvonne Sauget (Trust) site is an intermittent stream known as Dead Creek. Dead Creek, divided into six segments, in one of the many other projects that Ecology and Environment investigated during their Expanded Site Investigation and found to be contaminated with hazardous constituents. Approximately one and a half miles further west if the Mississippi River. A little less than one quarter of a mile south southeast of the Yvonne Sauget (Trust) site is a small intermittent stream.

Drainage from the site has the potential to flow in two directions. The most southwestern residential area located on the southwest fence of the site, sits approximately four feet lower than the site itself. This would allows for surface drainage along the southwest portion of the southwest fence to flow toward the residential houses. However, due to surrounding topography on a larger scale, the overall drainage from the site would be likely to runoff in a northeasterly direction.

An estimated two thirds of the Yvonne Sauget (Trust) site is located within an area of a 100-year flood boundary according to the National Flood Insurance Rate Maps.

Illinois American Water provides municipal water for the area of the Yvonne Sauget (Trust) site. This water originates from the Mississippi River. Due to the fact that the surface water drainage from the Yvonne Sauget (Trust) site would be unlikely to flow into the Mississippi River or any other surface water body, no surface water samples were collected during the December 8 and 9, 1992 CERCLA site inspection. Therefore, the surface pathway will be evaluated for this site.

5.4 SOIL EXPOSURE PATHWAY

Soil samples taken during the site inspection were obtained from eleven locations on-site (with a duplicate collected at one of the locations) and five off-site, one being a background sample. Sample result indicate an observed release in the soil exposure pathway by contaminants that are within the top two feet of soil or cover material. Compounds found three times above background concentrations or above detection limits from this sampling effort are considered valid as a confirmed release to the soil exposure pathway (please refer to Tables 3-1 and 3-2). Contributing factors to this contamination have been discusses previously.

During the approximate 25 years of operation, various degrees of surface disturbance has occurred at the site. There is no known record of the number of workers on-site during the years of operation or the number of workers and residents that have been on site since operations ceased in the late 1970's. (The CERCLA Preliminary Assessment Report completed in 1988 documents the existence of four residential homes in the previous location of the pit.) These people could have potentially contacted contaminated air. The same could be said about those individuals who had been or now frequent the site.

Currently the Sauget Mini-Park is situated on the majority of the Yvonne Sauget (Trust) site. The park mainly consists of a volleyball court, a playground area, a pavilion and several picnic tables and grills. The site extends a little further beyond the park to the northwest, which is a gravel road. The park is meant for recreational purposes for adult and children alike. There exists a potential danger, especially where the children are concerned, for coming in contact with contaminated soils, especially if the ground is disturbed (for example, if a child play in the dirt at

the site). Contamination, below current grade, is known to exist from grade surface to 20 feet below grade. The nearest individuals are located southwest of the southwest fence of the Yvonne Sauget (Trust) site. There are an estimated 13 single family houses in this residential area. They are located approximately 20 feet southwest of site. Analysis of three samples (X105, X109, and X116) collected from three different backyards indicates the presence of pesticides and PCBs that were, also, detected at the Yvonne Sauget (Trust) site. There are no known schools or daycare facilities on or within 200 feet if contaminated areas. Within a 4-mile radius of the site the population is calculated to be approximately 93,931 persons. The following table represents the estimated nearby populations (please refer to Appendix G for the CENTRACTS reports that identifies these populations).

Table 5-1 Populations Nearby the Yvonne Sauget (Trust) Site

DISTANCE	POPULATION
0-1/4 Mile	33
1/4-1/2 Mile	82
1/2-1 Mile	414
1-2 Mile	6,954
2-3 Mile	30,220
3-4 Mile	56,228

According to the Illinois Department of Conservation, there are no known sensitive resources on-site or within the area of concern for this site.

5.5 AIR PATHWAY

A photoionization detector(HNU) with an 11.7 eV lamp and an organic vapor analyzer (OVA)

were used to survey the ambient air that was released from material derived from the borings. The background reading from the OVA was at zero units and the background reading from the HNU was at six units. The high reading on the OVA for sample X103 was 800 units at approximately 13 feet deep. Sample X108 had a reading on the OVA at greater that 1000 units at about 12 feet deep. Soil sample X106 had an OVA reading at greater than 1000 units at approximately two and a half and 15 feet deep. The high reading for sample X114 was greatest reading from the HNU was at eight units above background during the boring of sample X103.

During the site inspection portion of the Integrated Assessment, no documented releases to the air were observed. For this reason the air migration pathway will not be evaluated.

6. BIBLIOGRAPHY

Ecology and Environment, Inc., 1988, Expanded Site Investigation Dead Creek Project Sites at Cahokia/Sauget Illinois; Final Report; Volume 1 of 2.

Illinois Environmental Protection Agency, 1991, Potential Hazardous Waste Site Preliminary Assessment for the Yvonne Sauget (Trust) site, ILD982073611, prepared by Tim Murphy, Springfield, Illinois.

Illinois State Museum by Colten, Craig E., Historical Assessment of Hazardous Waste Management in Madison and St. Clair Counties, Illinois, 1890-1980.

Illinois State Water Survey, 1968, Groundwater Levels and Pumpage on the East St. Louis Area, Illinois, 1962-1966, Circular 95.

SDMS US EPA Region V

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4-MILE RADIUS MAP

☐ **Other:**

APPENDIX B

USEPA FORM

2070-13

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	982073611

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Yvonne Sauget (Trust)	Park NE of Queeny Ave. + Ogden Ave. Intersection

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Sauget	IL	62206	St. Clair	163	22

09 COORDINATES LATITUDE	LONGITUDE
38° 35' 22.__	90° 10' 00.__

10 TYPE OF OWNERSHIP (Check one)
☒ A. PRIVATE ☐ B. FEDERAL _____ ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☐ F. OTHER _____ ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
12 / 8 / 9 / 92 (MONTH DAY YEAR)	☐ ACTIVE ☒ INACTIVE	~1950 (BEGINNING YEAR) ~1977 (ENDING YEAR) ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)
☒ A. EPA ☐ B. EPA CONTRACTOR _____ (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR _____ (Name of firm)
☐ E. STATE ☐ F. STATE CONTRACTOR _____ (Name of firm) ☐ G. OTHER _____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
Sheila Murphy	Environmental Protection Specialist	IEPA	(618) 993-7200
09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
Ken CorKill	Environmental Protection Specialist	IEPA	(217) 782-6760
Kim NiKa	Environmental Protection Specialist	IEPA	(217) 782-6760
Greg Spencer	Environmental Protection Specialist	IEPA	(217) 782-6760
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
Paul Sauget	Mayor	2897 Falling Springs Rd. Sauget	(618) 337-5267
Mike Williams	Village Employee	2897 Falling Springs Rd. Sauget	(618) 337-5267
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	Began at 10:45AM December 8, 1993	Sunny, about 37° F

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Paul Sauget	Mayor and Representative of site	(618) 337-5267

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Sheila Murphy Williams	IEPA		(618) 993-7200	9 / 30 / 93 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	980613611

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- ☐ A. SOLID
- ☐ B. POWDER, FINES
- ☐ C. SLUDGE
- ☐ D. OTHER (Specify) _____
- ☐ E. SLURRY
- ☐ F. LIQUID
- ☐ G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS _____
CUBIC YARDS _____
NO. OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

- ☒ A. TOXIC
- ☐ B. CORROSIVE
- ☐ C. RADIOACTIVE
- ☒ D. PERSISTENT
- ☐ E. SOLUBLE
- ☐ F. INFECTIOUS
- ☒ G. FLAMMABLE
- ☐ H. IGNITABLE
- ☐ I. HIGHLY VOLATILE
- ☐ J. EXPLOSIVE
- ☐ K. REACTIVE
- ☐ L. INCOMPATIBLE
- ☐ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	unknown		Materials placed in the previous pit are unknown. The following Contaminants were detected: 1 volatile, 1 semi-volatiles, 15 Pesticides/PCBs + 13 metals
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
PSD	Dieldrin	—	Disposal onto ground	210.0	PPB
PSD	4,4'- DDE	72-55-9	"	560.0	PPB
PSD	Endrin	—	"	17.0	PPB
PSD	Endosulfan II	33213-65-9	"	240.0	PPB
PSD	Endosulfan Sulfate	1031-07-8	"	38.0	PPB
PSD	4,4' DDT	—	"	540.0	PPB
PSD	Endrin Ketone	53494-70-5	"	5.6	PPB
PSD	Endrin aldehyde	—	"	13.0	PPB
PSD	alpha-Chlordane	5103-71-9	"	29.0	PPB
PSD	gamma-Chlordane	5103-74-2	"	22.0	PPB
PCB	Aroclor-1221	11104-28-2	"	310.0	PPB
PCB	Aroclor-1242	53469-21-9	"	420.0	PPB
PCB	Aroclor-1254	11097-69-1	"	540.0	PPB
PCB	Aroclor-1260	11096-82-5	"	4000.0	PPB
PCB	Aroclor-1016	12674-11-2	"	1200.0	PPB
	Chrysene	218-01-9	"	470.0	PPB

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

IDOT Historical Aerial Photographs
CERCLA Preliminary Assessment
IEPA Analytical Data
Ecology + Environment, Inc. Expanded Site Investigation, Dead Creek Project Sites

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: IL | 02 SITE NUMBER: 9820736 11

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None documented or observed.

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)
None documented or observed.

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None documented or observed.

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES (Spills/Runoff/Standing liquids, Leaking drums) — 02 ☒ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: — — 04 NARRATIVE DESCRIPTION
Historical aerial photographs documented standing liquids during operations

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None documented or observed.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None documented or observed.

01 ☒ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Operations most likely predated any environmental regulations. However, the site is CURRENTLY contaminated.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS
None

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

V. SOURCES OF INFORMATION (Cite specific references, e. g., state files, sample analysis, reports)
CERCLA Screening Site Inspection - 12/92
IDOT Historical Aerial Photographs
IEPA Analytical Data

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: IL | 02 SITE NUMBER: 9820736 11

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 [X] A. GROUNDWATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — [X] POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION
No groundwater samples were collected. However, groundwater contamination is probable. Groundwater was reached at 11'. Contaminated soil/materials were detected to a depth of 20'.

01 ☐ B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION
None observed or documented.

01 ☐ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION
None documented or observed

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION
None documented or observed.

01 [X] E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION
None documented or observed. However, the majority of the site is a recreational park + contamination was found at less than 2' deep.

01 [X] F. CONTAMINATION OF SOIL — 02 [X] OBSERVED (DATE: 12/8-9/92) — ☐ POTENTIAL — ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: 2.5 (Acres) — 04 NARRATIVE DESCRIPTION
Contamination was detected as shallow as 10" deep and as deep as 20'.

01 ☐ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION
None documented or observed.

01 ☐ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION
None documented or observed.

01 ☐ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION
None documented or observed.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	982073611

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES NONE				
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☐ G. STATE (Specify)				
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
☐ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☒ A. SURFACE IMPOUNDMENT	~84,000	cubic yards
☐ B. PILES		
☐ C. DRUMS, ABOVE GROUND		
☐ D. TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
☐ F. LANDFILL		
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER (Specify)		

04 TREATMENT (Check all that apply)
- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☐ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER (Specify)

05 OTHER
- ☒ A. BUILDINGS ON SITE

Pavilion

06 AREA OF SITE
~2.5 (Acres)

07 COMMENTS

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☐ A. ADEQUATE, SECURE ☐ B. MODERATE ☒ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

Due to the fact that operations predated any environmental regulations, it is highly unlikely that any form of containment (ex. liner) exists at the Yvonne Sauget (Trust) site.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☒ YES ☐ NO

02 COMMENTS

Contaminated soil/materials were documented as shallow as 10" below surface - probable contamination closer to the surface.

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

IDOT Historical Aerial Photographs
CERCLA Screening Site Inspection
St. Clair County Tax Assessor's Office

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	982073611

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)	SURFACE	WELL	02 STATUS: ENDANGERED	AFFECTED	MONITORED	03 DISTANCE TO SITE
COMMUNITY	A. X	B. ☐	A. ☐	B. ☐	C. X	A. 1.5 (mi)
NON-COMMUNITY	C. X	D. ☐	D. ☐	E. ☐	F. X	B. _____ (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☐ A. ONLY SOURCE FOR DRINKING ☐ B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available) ☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available) X D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER	03 DISTANCE TO NEAREST DRINKING WATER WELL
0	NA (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
~11 (ft)	unknown	N.A. (ft)	N.A. (gpd)	☐ YES ☐ NO

09 DESCRIPTION OF WELLS (Including useage, depth, and location relative to population and buildings)

N.A.

10 RECHARGE AREA		11 DISCHARGE AREA	
☐ YES ☐ NO	COMMENTS	☐ YES ☐ NO	COMMENTS

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

X A. RESERVOIR, RECREATION DRINKING WATER SOURCE ☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES ☐ C. COMMERCIAL, INDUSTRIAL ☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME: None suspected to be affected by this site.	AFFECTED	DISTANCE TO SITE
_____	☐	_____ (mi)
_____	☐	_____ (mi)
_____	☐	_____ (mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE	02 DISTANCE TO NEAREST POPULATION
0-1 mile	1-2 miles	2-3 miles	20 feet (mi)
A. 529 NO. OF PERSONS	B. 6954 NO. OF PERSONS	C. 30,220 NO. OF PERSONS	

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE	04 DISTANCE TO NEAREST OFF-SITE BUILDING
>1,000	20 feet (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)

The area in the vicinity of Yvonne Sauget (Trust) site is densely populated with residential homes and industries.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	9820736 11

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. $10^{-6} - 10^{-8}$ cm/sec ☐ B. $10^{-4} - 10^{-6}$ cm/sec ☒ C. $10^{-4} - 10^{-3}$ cm/sec ☐ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☐ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ☐ B. RELATIVELY IMPERMEABLE ($10^{-4} - 10^{-6}$ cm/sec) ☒ C. RELATIVELY PERMEABLE ($10^{-2} - 10^{-4}$ cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH	
~20 (ft)	10"-20'+ (ft)	-	

06 ~~NET~~ PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE		
		SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
35.4 (in) 80 year avg.	(in)	0 %	Northeast	0 %

09 FLOOD POTENTIAL

SITE IS IN 100 YEAR FLOODPLAIN

10

☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE	OTHER
A. 1 7/8 (mi)	B. - (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

None (mi)

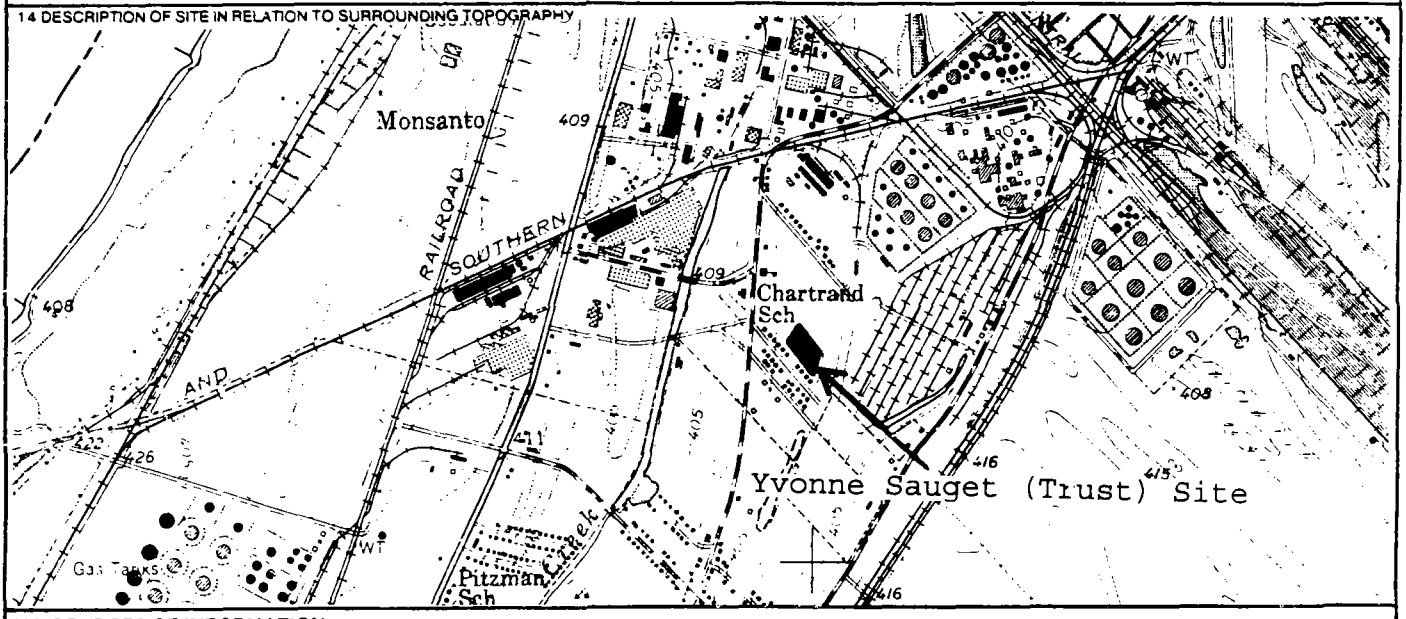
ENDANGERED SPECIES: None

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS PRIME AG LAND	AGRICULTURAL LANDS AG LAND
A. adjacent to site (mi)	B. adjacent to site (mi)	C. >2 (mi)	D. - (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY



VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

ISGS 7.5 Topo Map
CERCLA Screening Site Inspection
National Flood Insurance Rate Map
Ecology + Environment, Inc. Expanded Site Investigation

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	98207361 1

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER			
SURFACE WATER			
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL	16	IEPA Laboratories	4/6/93
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
Samples	Measurements were taken for the location of samples.

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☒ GROUND ☒ AERIAL

02 IN CUSTODY OF IEPA
(Name of organization or individual)

03 MAPS ☒ YES ☐ NO

04 LOCATION OF MAPS onsite + vicinity

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

CERCLA Screening Site Inspection
IDOT Historical Aerial Photographs
IEPA Laboratories

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	9820736 11

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
Park Village of Sauget		2897 Falling Springs Rd.		Sauget	IL	62206
MTS, Inc. Yvonne Lame Sauget Trust		17 Thornhurst CT		Columbia	IL	62236

PARENT COMPANY (If applicable)

08 NAME	09 D+B NUMBER	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE	12 CITY	13 STATE	14 ZIP CODE

III. PREVIOUS OWNER(S) (List most recent first)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
Park Yvonne Lame Sauget Trust		17 Thornhurst Ct.		Columbia	IL	62236

IV. REALTY OWNER(S) (If applicable; list most recent first)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

St. Clair County Tax Assessor's Office

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	982073611

II. CURRENT OPERATOR (Provide if different from owner)

01 NAME	02 D+B NUMBER
Park Village of Sauget	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
2897 Falling Springs Rd.	

05 CITY	06 STATE	07 ZIP CODE
Sauget	IL	62206

08 YEARS OF OPERATION	09 NAME OF OWNER
~2 years	Village of Sauget

OPERATOR'S PARENT COMPANY (If applicable)

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)

01 NAME	02 D+B NUMBER
Yvonne Lame Sauget Trust	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
17 Thornhurst Ct	

05 CITY	06 STATE	07 ZIP CODE
Columbia	IL	62236

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD
~25	Yvonne Lame Sauget Trust

PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

St. Clair County Tax Assessor's Office

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	98207361 1

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
N.A	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
N.A.			
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
N.A.			
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

V. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	982073611

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED 04 DESCRIPTION None	02 DATE	03 AGENCY
01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED 04 DESCRIPTION None	02 DATE	03 AGENCY
01 ☐ C. PERMANENT WATER SUPPLY PROVIDED 04 DESCRIPTION None	02 DATE	03 AGENCY
01 ☐ D. SPILLED MATERIAL REMOVED 04 DESCRIPTION None	02 DATE	03 AGENCY
01 ☐ E. CONTAMINATED SOIL REMOVED 04 DESCRIPTION None	02 DATE	03 AGENCY
01 ☐ F. WASTE REPACKAGED 04 DESCRIPTION None	02 DATE	03 AGENCY
01 ☐ G. WASTE DISPOSED ELSEWHERE 04 DESCRIPTION None	02 DATE	03 AGENCY
01 ☐ H. ON SITE BURIAL 04 DESCRIPTION None	02 DATE	03 AGENCY
01 ☐ I. IN SITU CHEMICAL TREATMENT 04 DESCRIPTION None	02 DATE	03 AGENCY
01 ☐ J. IN SITU BIOLOGICAL TREATMENT 04 DESCRIPTION None	02 DATE	03 AGENCY
01 ☐ K. IN SITU PHYSICAL TREATMENT 04 DESCRIPTION None	02 DATE	03 AGENCY
01 ☐ L. ENCAPSULATION 04 DESCRIPTION None	02 DATE	03 AGENCY
01 ☐ M. EMERGENCY WASTE TREATMENT 04 DESCRIPTION None	02 DATE	03 AGENCY
01 ☐ N. CUTOFF WALLS 04 DESCRIPTION None	02 DATE	03 AGENCY
01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION 04 DESCRIPTION None	02 DATE	03 AGENCY
01 ☐ P. CUTOFF TRENCHES/SUMP 04 DESCRIPTION None	02 DATE	03 AGENCY
01 ☐ Q. SUBSURFACE CUTOFF WALL 04 DESCRIPTION None	02 DATE	03 AGENCY

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	9820736 11

II PAST RESPONSE ACTIVITIES *(Continued)*

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ S. CAPPING/COVERING — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
Site had fill material (contaminated) put on it to grade to surrounding topography.

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
Site is accessible.

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

III. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

CERCLA Screening Site Inspection
IDOT Aerial Photographs.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	9820736H

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☐ YES ☒ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

None.

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Operations occurred prior to Environmental Regulations.

APPENDIX C

TARGET COMPOUND

LIST

TARGET COMPOUND LIST

Volatile Target Compounds

Chloromethane
Bromomethane
Vinyl Chloride
Chloroethane
Methylene Chloride
Acetone
Carbon Disulfide
1,1-Dichloroethene
1,1-Dichloroethane
1,2-Dichloroethene (total)
Chloroform
1,2-Dichloroethane
2-Butanone
1,1,1-Trichloroethane
Carbon Tetrachloride
Vinyl Acetate
Bromodichloromethane
1,2-Dichloropropane
cis-1,3-Dichloropropene
Trichloroethene
Dibromochloromethane
1,1,2-Trichloroethane
Benzene
trans-1,3-Dichloropropene
Bromoform
4-Methyl-2-pentanone
2-Hexanone
Tetrachloroethene
1,1,2,2-Tetrachloroethane
Toluene
Chlorobenzene
Ethylbenzene
Styrene
Xylenes (total)

Base/Neutral Target Compounds

Hexachloroethane
bis(2-Chloroethyl)Ether
Benzyl Alcohol
bis(2-Chloroisopropyl)Ether
N-Nitroso-Di-n-Propylamine
Nitrobenzene
Hexachlorobutadiene
2-Methylnaphthalene
1,2,4-Trichlorobenzene
Isophorone
Naphthalene
4-Chloroaniline
bis(2-chloroethoxy)Methane
Hexachlorocyclopentadiene
2-Chloronaphthalene
2-Nitroaniline
Acenaphthylene
3-Nitroaniline
Acenaphthene
Dibenzofuran
Dimethyl Phthalate
2,6-Dinitrotoluene
Fluorene
4-Nitroaniline
4-Chlorophenyl-phenylether
2,4-Dinitrotoluene
Diethylphthalate
N-Nitrosodiphenylamine
Hexachlorobenzene
Phenanthrene
4-Bromophenyl-phenylether
Anthracene
Di-n-Butylphthalate
Fluoranthene
Pyrene
Butylbenzylphthalate
bis(2-Ethylhexyl)Phthalate
Chrysene
Benzo(a)Anthracene
3,3'-Dichlorobenzidene
Di-n-Octyl Phthalate
Benzo(b)Fluoranthene
Benzo(k)Fluoranthene
Benzo(a)Pyrene
Indeno(1,2,3-cd)Pyrene
Dibenz(a,h)Anthracene
Benzo(g,h,i)Perylene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene

Acid Target Compounds

Benzoic Acid
Phenol
2-Chlorophenol
2-Nitrophenol
2-Methylphenol
2,4-Dimethylphenol
4-Methylphenol
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,4,5-Trichlorophenol
4-Chloro-3-methylphenol
2,4-Dinitrophenol
2-Methyl-4,6-dinitrophenol
Pentachlorophenol
4-Nitrophenol

Pesticide/PCB Target Compounds

alpha-BHC
beta-BHC
delta-BHC
gamma-BHC (Lindane)
Heptachlor
Aldrin
Heptachlor epoxide
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin Ketone
Endosulfan Sulfate
Methoxychlor
alpha-Chlorodane
gamma-Chlorodane
Toxaphene
Aroclor-1016
Aroclor-1221
Aroclor-1232
Aroclor-1242
Aroclor-1248
Aroclor-1254
Aroclor-1260

Inorganic Target Compounds

Aluminum
Antimony
Arsenic
Barium
Beryllium
Cadmium
Calcium
Chromium
Cobalt
Copper
Iron
Lead
Magnesium
Manganese
Mercury
Nickel
Potassium
Selenium
Silver
Sodium
Thallium
Vanadium
Zinc
Cyanide
Sulfide
Sulfate

APPENDIX D

IEPA

PHOTOGRAPHS

DATE: 11/2/92	SITE ILD#: 982073611 COUNTY: St. Clair
TIME: 12:13 PM	SITE NAME: YVONNE SAUGET (TRUST)
PHOTOGRAPH TAKEN BY: S. MURPHY	
COMMENTS: Picture taken toward:	
NORTHWEST	
PHOTO #1	

DATE: 11/2/92	
TIME: 12:14 PM	
PHOTOGRAPH TAKEN BY: S. MURPHY	
COMMENTS: Picture taken toward:	
NORTHWEST	
PHOTO #2	

DATE: 11/2/92	SITE ILD#: 982073611 COUNTY: St. Clair
TIME: 12:17 PM	SITE NAME: YVONNE SAUGET (TRUST)

PHOTOGRAPH TAKEN BY: S. MURPHY

COMMENTS: Picture taken toward:

NORTH NORTHWEST

PHOTO #3

DATE: 11/2/92

TIME: 12:18 PM

PHOTOGRAPH TAKEN BY: S. MURPHY

COMMENTS: Picture taken toward:

NORTHWEST

PHOTO #4

DATE: 11/2/92	SITE ILD#: 982073611 COUNTY: St. Clair
TIME: 12:20 PM	SITE NAME: YVONNE SAUGET (TRUST)
PHOTOGRAPH TAKEN BY: S. MURPHY	
COMMENTS: Picture taken toward:	
SOUTH SOUTHEAST	
PHOTO #5	

DATE: 11/2/92
TIME: 12:20 PM
PHOTOGRAPH TAKEN BY: S. MURPHY
COMMENTS: Picture taken toward:
SOUTH
PHOTO #6

DATE: 12/8/92	SITE ILD#: 982073611 COUNTY: St. Clair
TIME: 11:20 AM	SITE NAME: YVONNE SAUGET (TRUST)

PHOTOGRAPH TAKEN BY: S. MURPHY

COMMENTS: Picture taken toward:

SOUTH SOUTHWEST

PHOTO A-1

DATE: 12/8/92

TIME: 11:23 AM

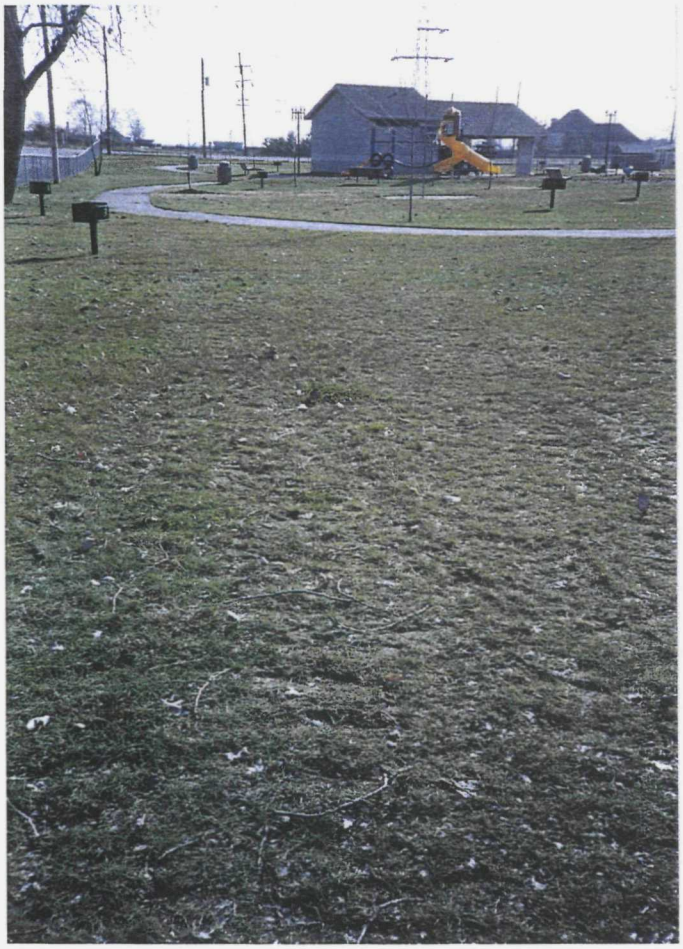
PHOTOGRAPH TAKEN BY: K. CORKILL

COMMENTS: Picture taken toward:

NORTHWEST

PHOTO A-2

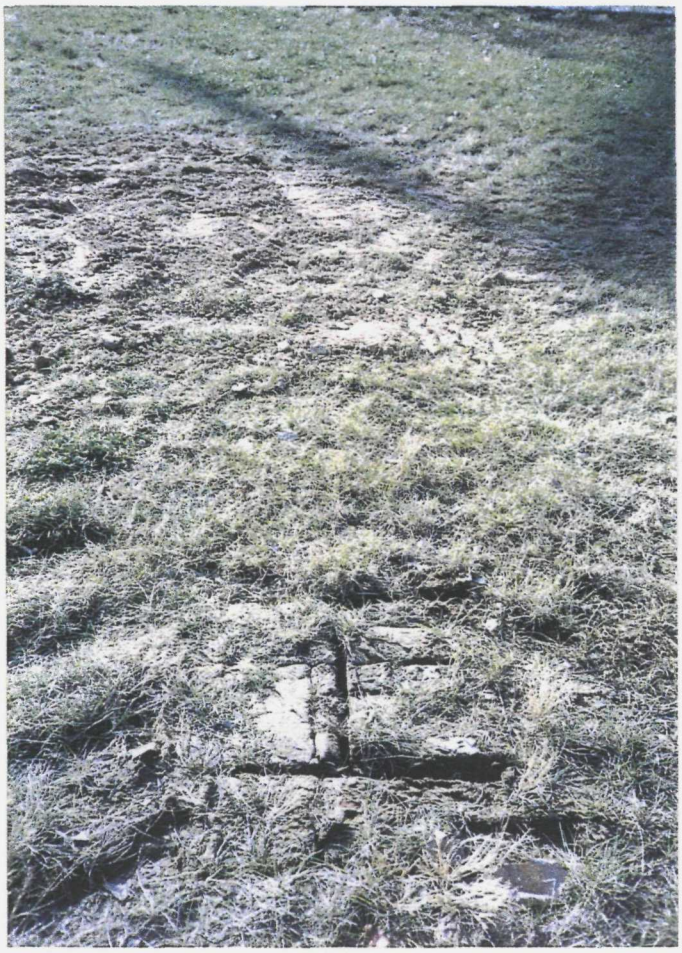
DATE: 12/8/92	SITE ILD#: 982073611 COUNTY: St. Clair
TIME: 11:25 AM	SITE NAME: YVONNE SAUGET (TRUST)
PHOTOGRAPH TAKEN BY: K. CORKILL	
COMMENTS: Picture taken toward:	
SOUTHEAST	
PHOTO A-3	



DATE: 12/8/92
TIME: 11:35 AM
PHOTOGRAPH TAKEN BY: K. CORKILL
COMMENTS: Picture taken toward:
SOUTH SOUTHWEST
PHOTO A-4

DATE: 12/8/92	SITE ILD#: 982073611 COUNTY: St. Clair
TIME: 11:35 AM	SITE NAME: YVONNE SAUGET (TRUST)
PHOTOGRAPH TAKEN BY: K. CORKILL	
COMMENTS: Picture taken toward:	
SOUTHWEST	
PHOTO A-5	

DATE: 12/8/92
TIME: 11:35 AM
PHOTOGRAPH TAKEN BY: K. CORKILL
COMMENTS: Picture taken toward:
SOUTHWEST
PHOTO A-6



DATE: 12/8/92	SITE ILD#: 982073611 COUNTY: St. Clair
TIME: 11:40 AM	SITE NAME: YVONNE SAUGET (TRUST)
PHOTOGRAPH TAKEN BY: K. CORKILL	
COMMENTS: Picture taken toward:	
SOUTHEAST	
PHOTO A-7	

DATE: 12/8/92
TIME: 11:40 AM
PHOTOGRAPH TAKEN BY: K. CORKILL
COMMENTS: Picture taken toward:
SOUTHWEST
PHOTO A-8

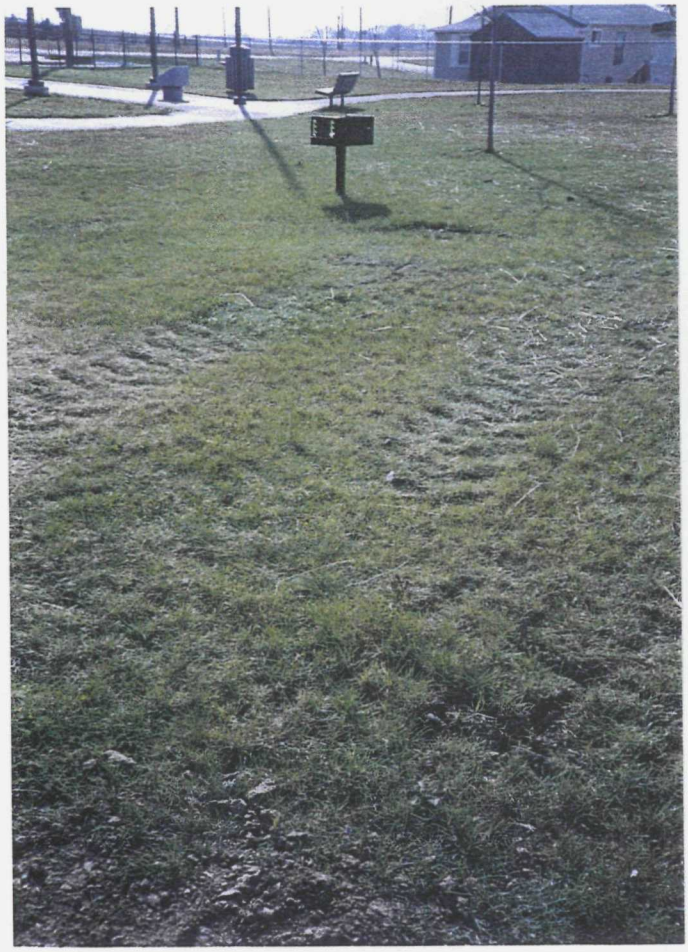
DATE: 12/8/92	SITE ILD#: 982073611 COUNTY: St. Clair
TIME: 11:46 AM	SITE NAME: YVONNE SAUGET (TRUST)

PHOTOGRAPH TAKEN BY: K. CORKILL

COMMENTS: Picture taken toward:

SOUTH

PHOTO A-9



DATE: 12/8/92

TIME: 11:50 AM

PHOTOGRAPH TAKEN BY: K. CORKILL

COMMENTS: Picture taken toward:

NORTH NORHTWEST

PHOTO A-10

DATE: 12/8/92	SITE ILD#: 982073611 COUNTY: St. Clair
TIME: 11:51 AM	SITE NAME: YVONNE SAUGET (TRUST)

PHOTOGRAPH TAKEN BY: K. CORKILL

COMMENTS: Picture taken toward:

WEST NORTHWEST

PHOTO A-11

DATE: 12/8/92

TIME: 11:55 AM

PHOTOGRAPH TAKEN BY: K. CORKILL

COMMENTS: Picture taken toward:

WEST NORTHWEST

PHOTO A-12

DATE: 12/8/92	SITE ILD#: 982073611 COUNTY: St. Clair
TIME: 11:57 AM	SITE NAME: YVONNE SAUGET (TRUST)

PHOTOGRAPH TAKEN BY: K. CORKILL

COMMENTS: Picture taken toward:

SOUTHEAST

PHOTO A-13

DATE: 12/8/92

TIME: 1:00 PM

PHOTOGRAPH TAKEN BY: K. CORKILL

COMMENTS: Picture taken toward:

NORTHEAST

PHOTO B-1

DATE: 12/8/92	SITE ILD#: 982073611 COUNTY: St. Clair
TIME: 1:00 PM	SITE NAME: YVONNE SAUGET (TRUST)

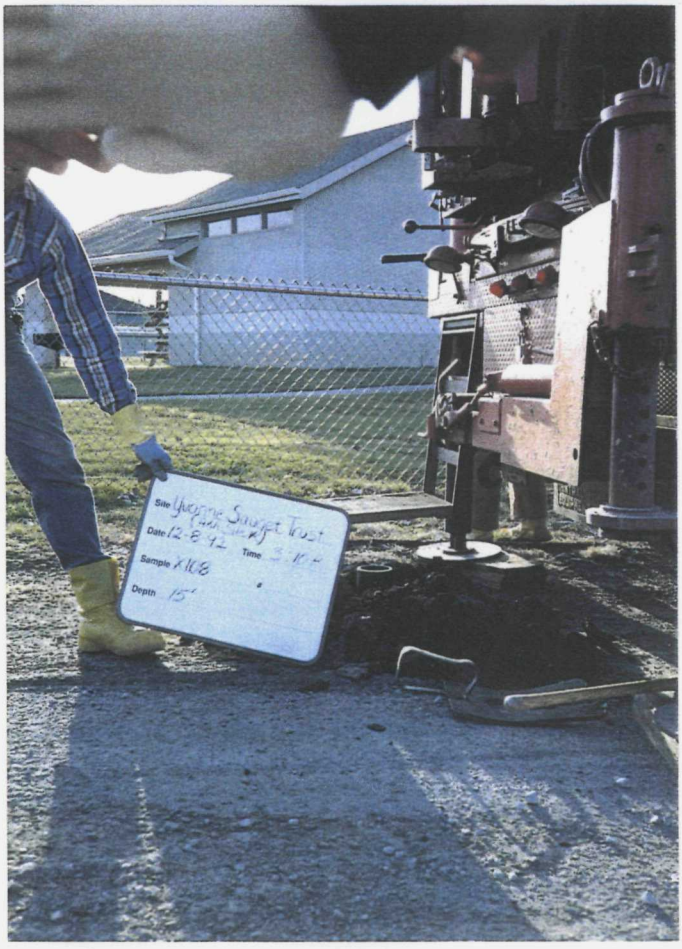
PHOTOGRAPH TAKEN BY: K. CORKILL

COMMENTS: Picture taken toward:

NORTHWEST

PHOTO B-2

DATE: 12/8/92
TIME: 3:25 PM
PHOTOGRAPH TAKEN BY: K. NIKA
COMMENTS: Picture taken toward:
SOUTH
PHOTO B-3



DATE: 12/8/92	SITE ILD#: 982073611 COUNTY: St. Clair
TIME: 3:26 PM	SITE NAME: YVONNE SAUGET (TRUST)

PHOTOGRAPH TAKEN BY: K. NIKA

COMMENTS: Picture taken toward:

NORTHEAST

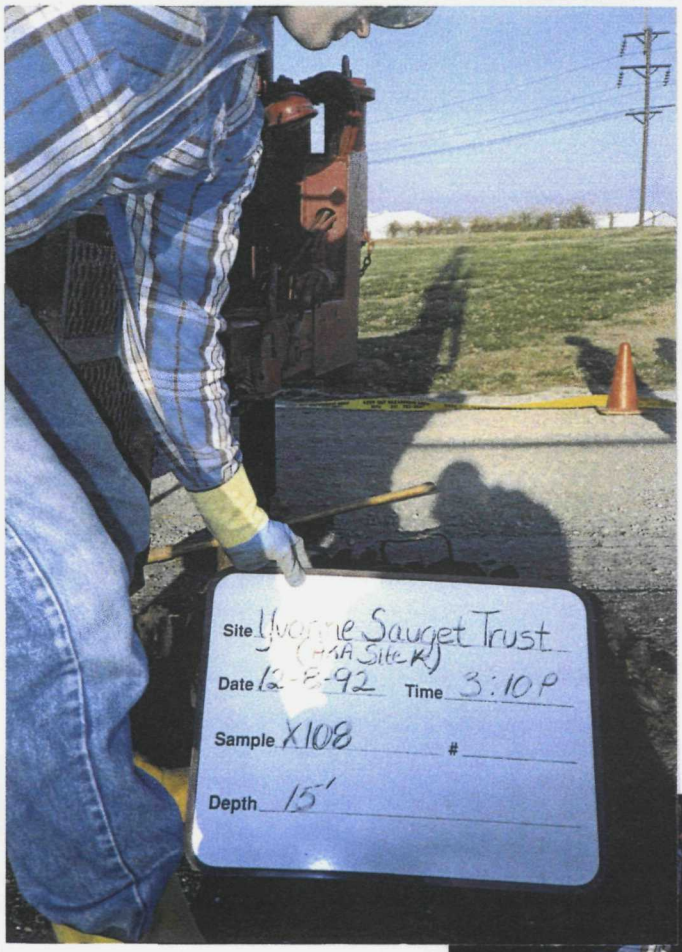


PHOTO B-4

DATE: 12/8/92	
TIME: 3:26 PM	

PHOTOGRAPH TAKEN BY: K. NIKA

COMMENTS: Picture taken toward:

NORTHEAST

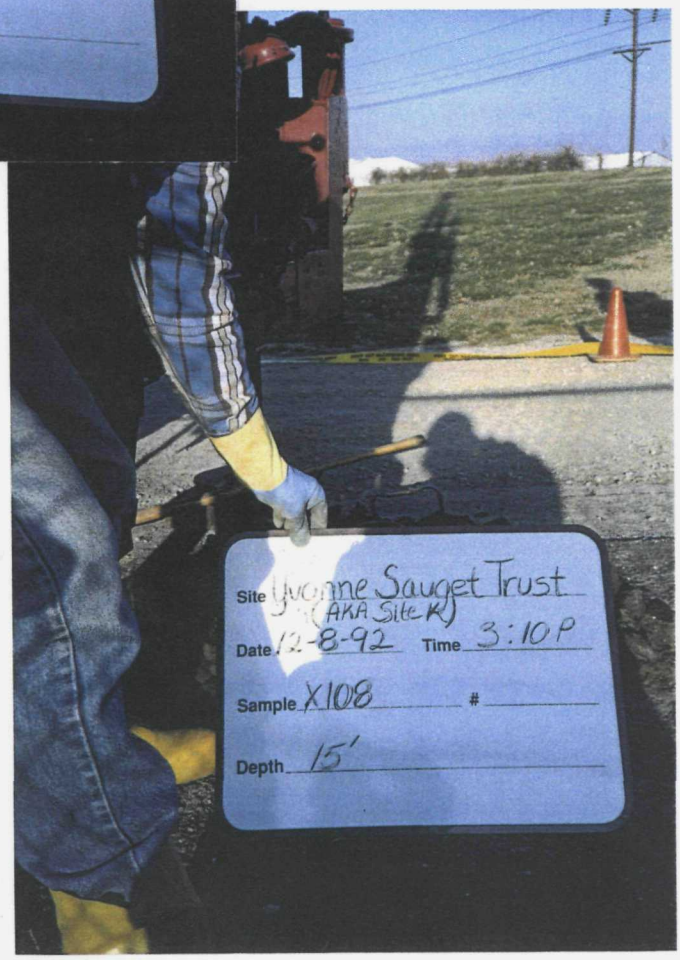
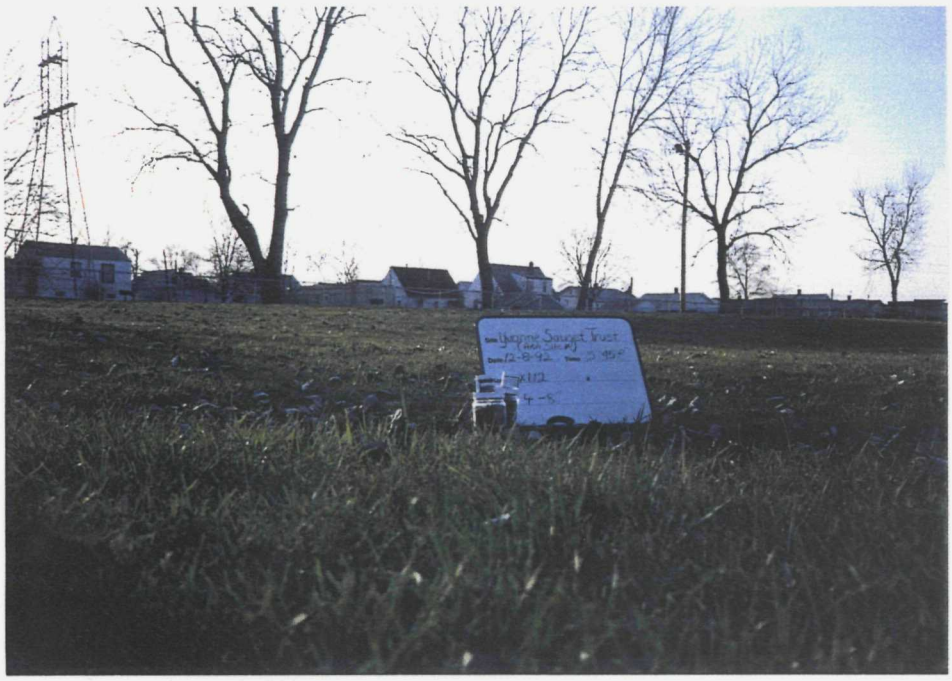


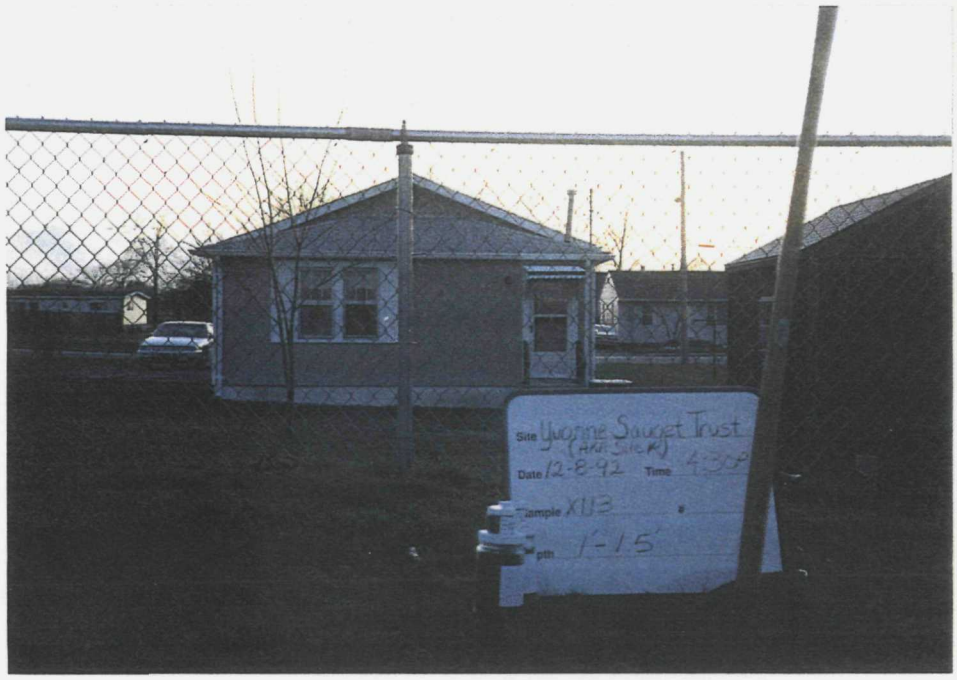
PHOTO B-5

DATE: 12/8/92	SITE ILD#: 982073611 COUNTY: St. Clair
TIME: 3:54 PM	SITE NAME: YVONNE SAUGET (TRUST)
PHOTOGRAPH TAKEN BY: G. SPENCER	
COMMENTS: Picture taken toward:	
NORTH NORTHEAST	
PHOTO B-6	

DATE: 12/8/92
TIME: 3:54 PM
PHOTOGRAPH TAKEN BY: G. SPENCER
COMMENTS: Picture taken toward:
NORTH NORTHWEST
PHOTO B-7



DATE: 12/8/92	SITE ILD#: 982073611 COUNTY: St. Clair
TIME: 4:40 PM	SITE NAME: YVONNE SAUGET (TRUST)
PHOTOGRAPH TAKEN BY: G. SPENCER	
COMMENTS: Picture taken toward:	
SOUTH SOUTHWEST	
PHOTO B-8	



DATE: 12/8/92
TIME: 4:42 PM
PHOTOGRAPH TAKEN BY: G. SPENCER
COMMENTS: Picture taken toward:
NORHTWEST
PHOTO B-9

DATE: 12/9/92	SITE ILD#: 982073611 COUNTY: St. Clair
TIME: 10:05 AM	SITE NAME: YVONNE SAUGET (TRUST)
PHOTOGRAPH TAKEN BY: K. NIKA	
COMMENTS: Picture taken toward:	
SOUTH	
PHOTO B-10	

DATE: 12/9/92
TIME: 10:05 AM
PHOTOGRAPH TAKEN BY: K. NIKA
COMMENTS: Picture taken toward:
WEST NORTHWEST
PHOTO B-11

DATE: 12/9/92	SITE ILD#: 982073611 COUNTY: St. Clair
TIME: 10:20 AM	SITE NAME: YVONNE SAUGET (TRUST)

PHOTOGRAPH TAKEN BY: S. MURPHY

COMMENTS: Picture taken toward:

NORTH

PHOTO B-12

DATE: 12/9/92

TIME: 10:21 AM

PHOTOGRAPH TAKEN BY: S. MURPHY

COMMENTS: Picture taken toward:

NORTHWEST

PHOTO C-1

DATE: 12/9/92	SITE ILD#: 982073611 COUNTY: St. Clair
TIME: 10:25 AM	SITE NAME: YVONNE SAUGET (TRUST)
PHOTOGRAPH TAKEN BY: G. SPENCER	
COMMENTS: Picture taken toward:	
WEST	
PHOTO C-2	

DATE: 12/9/92
TIME: 10:26 AM
PHOTOGRAPH TAKEN BY: G. SPENCER
COMMENTS: Picture taken toward:
NORTHWEST
PHOTO C-3

DATE: 12/9/92	SITE ILD#: 982073611 COUNTY: St. Clair
TIME: 10:40 AM	SITE NAME: YVONNE SAUGET (TRUST)
PHOTOGRAPH TAKEN BY: G. SPENCER	
COMMENTS: Picture taken toward:	
WEST	
PHOTO C-4	

DATE: 12/9/92
TIME: 10:40 AM
PHOTOGRAPH TAKEN BY: G. SPENCER
COMMENTS: Picture taken toward: NORTHWEST
PHOTO C-5

DATE: 12/9/92	SITE ILD#: 982073611 COUNTY: St. Clair
TIME: 11:10 AM	SITE NAME: YVONNE SAUGET (TRUST)
PHOTOGRAPH TAKEN BY: G. SPENCER	
COMMENTS: Picture taken toward:	
SOUTHWEST	
PHOTO C-6	

DATE: 12/9/92
TIME: 11:10 AM
PHOTOGRAPH TAKEN BY: G. SPENCER
COMMENTS: Picture taken toward:
NORTHEAST
PHOTO C-7

DATE: 12/9/92	SITE ILD#: 982073611 COUNTY: St. Clair
TIME: 11:40 AM	SITE NAME: YVONNE SAUGET (TRUST)
PHOTOGRAPH TAKEN BY: G. SPENCER	
COMMENTS: Picture taken toward:	
SOUTHWEST	
PHOTO C-8	

DATE: 12/9/92
TIME: 11:40 AM
PHOTOGRAPH TAKEN BY: G. SPENCER
COMMENTS: Picture taken toward:
SOUTHWEST
PHOTO C-9

DATE: 12/9/92	SITE ILD#: 982073611 COUNTY: St. Clair
TIME: 11:40 AM	SITE NAME: YVONNE SAUGET (TRUST)
PHOTOGRAPH TAKEN BY: G. SPENCER	
COMMENTS: Picture taken toward:	
NORTHEAST	
PHOTO C-10	

DATE: 12/9/92
TIME: 12:11 PM
PHOTOGRAPH TAKEN BY: G. SPENCER
COMMENTS: Picture taken toward:
SOUTHWEST
PHOTO C-11

DATE: 12/9/92	SITE ILD#: 982073611 COUNTY: St. Clair
TIME: 12:11 PM	SITE NAME: YVONNE SAUGET (TRUST)
PHOTOGRAPH TAKEN BY: G. SPENCER	
COMMENTS: Picture taken toward:	
EAST	
PHOTO C-12	

DATE:
TIME:
PHOTOGRAPH TAKEN BY:
COMMENTS: Picture taken toward:

NO
PHOTO

DATE: 12/9/92	SITE ILD#: 982073611 COUNTY: St. Clair
TIME: 12:40 PM	SITE NAME: YVONNE SAUGET (TRUST)

PHOTOGRAPH TAKEN BY: S. MURPHY

COMMENTS: Picture taken toward:

NORTH

PHOTO D-1

DATE: 12/9/92

TIME: 12:40 PM

PHOTOGRAPH TAKEN BY: S. MURPHY

COMMENTS: Picture taken toward:

SOUTH

PHOTO D-2

DATE: 12/9/92	SITE ILD#: 982073611 COUNTY: St. Clair
TIME: 12:50 PM	SITE NAME: YVONNE SAUGET (TRUST)
PHOTOGRAPH TAKEN BY: GREG SPENCER	
COMMENTS: Picture taken toward:	
SOUTHWEST	
PHOTO D-3	

DATE: 12/9/92
TIME: 12:50 PM
PHOTOGRAPH TAKEN BY: G. SPENCER
COMMENTS: Picture taken toward:
NORTHEAST
PHOTO D-4

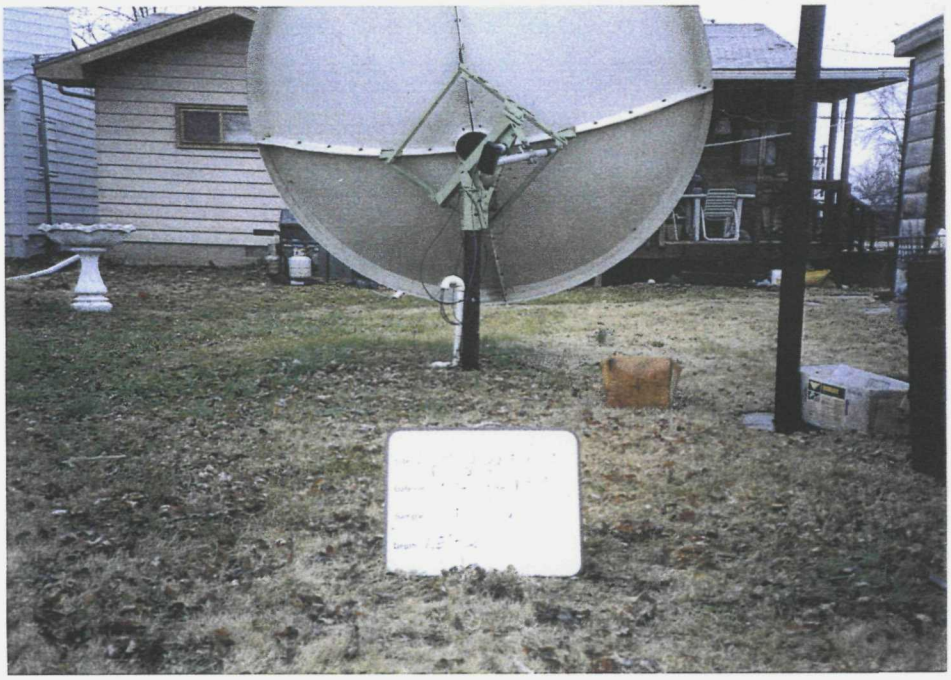
DATE: 12/9/92	SITE ILD#: 982073611 COUNTY: St. Clair
TIME: 12:55 PM	SITE NAME: YVONNE SAUGET (TRUST)
PHOTOGRAPH TAKEN BY: G. SPENCER	
COMMENTS: Picture taken toward:	
SOUTHWEST	
PHOTO D-5	

DATE: 12/9/92
TIME: 12:55 PM
PHOTOGRAPH TAKEN BY: G. SPENCER
COMMENTS: Picture taken toward:
NORTHEAST
PHOTO D-6

DATE: 12/9/92	SITE ILD#: 982073611 COUNTY: St. Clair
TIME: 1:40 PM	SITE NAME: YVONNE SAUGET (TRUST)
PHOTOGRAPH TAKEN BY: G. SPENCER	
COMMENTS: Picture taken toward:	
EAST	
PHOTO D-7	

DATE: 12/9/92
TIME: 1:40 PM
PHOTOGRAPH TAKEN BY: G. SPENCER
COMMENTS: Picture taken toward:
SOUTHWEST
PHOTO D-8

DATE: 12/9/92	SITE ILD#: 982073611 COUNTY: St. Clair
TIME: 2:05 PM	SITE NAME: YVONNE SAUGET (TRUST)
PHOTOGRAPH TAKEN BY: G. SPENCER	
COMMENTS: Picture taken toward:	
SOUTHWEST	
PHOTO D-9	



DATE: 12/9/92
TIME: 2:05 PM
PHOTOGRAPH TAKEN BY: G. SPENCER
COMMENTS: Picture taken toward:
NORTHEAST
PHOTO D-10

DATE: 12/9/92	SITE ILD#: 982073611 COUNTY: St. Clair
TIME: 2:25 PM	SITE NAME: YVONNE SAUGET (TRUST)
PHOTOGRAPH TAKEN BY: G. SPENCER	
COMMENTS: Picture taken toward:	
SOUTHWEST	
PHOTO D-11	

DATE: 12/9/92
TIME: 2:25 PM
PHOTOGRAPH TAKEN BY: G. SPENCER
COMMENTS: Picture taken toward:
NORTHEAST
PHOTO D-12

DATE: 12/9/92	SITE ILD#: 982073611 COUNTY: St. Clair
TIME: 2:55 PM	SITE NAME: YVONNE SAUGET (TRUST)
PHOTOGRAPH TAKEN BY: G. SPENCER	
COMMENTS: Picture taken toward:	
SOUTHWEST	
PHOTO D-13	

DATE: 12/9/92
TIME: 2:55 PM
PHOTOGRAPH TAKEN BY: G. SPENCER
COMMENTS: Picture taken toward:
SOUTH
PHOTO E-1

DATE: 12/9/92	SITE ILD#: 982073611 COUNTY: St. Clair
TIME: 2:55 PM	SITE NAME: YVONNE SAUGET (TRUST)
PHOTOGRAPH TAKEN BY: G. SPENCER	
COMMENTS: Picture taken toward:	
NORTH	
PHOTO E-2	

APPENDIX E

WELL LOGS

Plotted on Cahokia Quad.

LOG OF WATER WELL

Property owner Midwest Rubber Reclaiming Co. East St. Louis Well No. #4

Drilled by ______ Year May 1951

Formations passed through	Thickness	Depth of Bottom
Clay	7	7
Dry yellow sand	21	28
Building sand	17	45
Fine gray sand	9	54
Med. Coarse sand	6	60
Ex. fine very dirty sand + silt	18	78
Coarse sand + boulders	32	110

[Continue on back if necessary]

Finished in ______ at ______ to ______ ft.

COUNTY No. 1940

Cased with ______ inch ______ from 0 to ______ ft.

and ______ inch ______ from ______ to ______ ft.

Size hole below casing ______ inch. Static level from surf. 36' 10" ft.

Tested capacity ______ gal. per min. Temperature ______ °F.

Water lowered to ______ ft. ______ in. in ______ hrs. ______ min.

Length of test ______ hrs. ______ min. Screen ______

Slot ______ Diam. ______ Length ______ Bottom set at ______ ft.

[Show location in Section Plat]

Township name ______ Elev. ______ Sec. 26

Description of location ______ Twp. 2N

Rge. 10 W

Location by Brown Lumber [illegible]

Signed ______ County St. Clair

ST. CLAIR NO ENVELOPE 26-2N-10W

Copy for Illinois State Geological Survey Index:

...QUESTED AND MAIL ORIGINAL TO STATE ...MER HEALTH PROTECTION, 535 WEST ... DO NOT ...ACH GEOLOGICAL/WATER PROPER W... LOCATION.

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 4-12-76

10. Property owner Clayton Chemical Co. Well No. ______
    Address 101 S. Brentwood Clayton, Mo.
    Driller [illegible] Drilling Co License No. 102-50
11. Permit No. 45480 Date 3-22-76
12. Water from Sand & Gravel (Formation) 13. County St. Clair
    at depth 40 to 78 ft. Sec. 26
14. Screen: Diam. ______ in. Twp. 2N
    Length: 10 ft. Slotted ✓ Rge. 10W
    Elev. ______
15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
6 5/8	PVC	0	78

SHOW LOCATION IN SECTION PLAT

562'SL, 587'WL SW (permit)

16. Size Hole below casing: 10 in.
17. Static level 15 ft. below casing top which is 1 ft. above ground level. Pumping level ______ ft. when pumping at 200+ gpm for ______ hours. Sub. pump set at 60'.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Clay	40	40
Sand & Gravel	38	78

RECEIVED SEP 2 ? 1993 Environmental Protection Agency MARION REGIONAL OFFICE

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [signature] DATE 5-4-76

ST. CLAIR COUNTY No. 24077 26-2N-10W

89 435

Plotted in Cahokia Quad.

LOG OF WATER WELL

Property owner Midwest Rubber Reclaiming Co. Well No. 2

Drilled by Thorpe (Morgan) Year ?

Formations passed through	Thickness	Depth of Bottom
Sandy soil	27	27
River silt	8	35
Coarse sand + pea gravel	8	43
Gt. fine sand + silt	21	64
Very coarse sand	6	70
Coarse sand, wood, decayed veg., etc.	11	81
Very coarse sand	5	86
Very coarse sand + gravel	28	114

[Continue on back if necessary]

Finished in ______ COUNTY No. 1938 ______ to ______ ft.

Cased with ______ inch ______ from 0 to ______ ft.

and ______ inch ______ from ______ to ______ ft.

Size hole below casing ______ inch. Static level from surf. 25' 6" ft.

Tested capacity ______ gal. per min. Temperature ______ °F.

Water lowered to ______ ft. ______ in. in ______ hrs. ______ min.

Length of test ______ hrs. ______ min. Screen ______

Slot ______ Diam. ______ Length ______ Bottom set at ______ ft.

[Show location in Section Plat]

Township name ______ Elev. ______ Sec. 26

Description of location ______ Twp. 2N

Rge. 10W

Location by Drawn..., ...

Signed ______ County St. Clair

ST. CLAIR

Copy for Illinois State Geological Survey NO ENVELOPE Index: 26-2N-10W

436

Well Log #435

See Ms. Luther

LOG OF WATER WELL

Property owner Midwest Rubber Reclaiming Co. Well No. 3

Drilled by Thorpe (Morgan) Year Mar. 1951

Formations passed through	Thickness	Depth of Bottom
Hard fill	3	3
Fine dry sand + silt	34	37
Med. fine sand very dirty	14	51
Med. coarse sand, dirty	11	62
Building sand some fine gravel	9	71
Clean coarse sand	23	94
Coarse sand + boulders	8	102
Med. coarse sand	10	112

[Continue on back if necessary]

Finished in ______ COUNTY No. 1939 ______ to ______ ft.

Cased with ______ inch ______ from 0 to ______ ft.

and ______ inch ______ from ______ to ______ ft.

Size hole below casing ______ inch. Static level from surf. 35' Apr. 18 ft.

Tested capacity ______ gal. per min. Temperature ______ °F.

Water lowered to ______ ft. ______ in. in ______ hrs. ______ min.

Length of test ______ hrs. ______ min. Screen ______

Slot ______ Diam. ______ Length ______ Bottom set at ______ ft.

[Show location in Section Plat]

Township name ______ Elev. ______ Sec. 26

Description of location ______ Twp. 2N

Rge. 10W

Location by Drawn..., ...

Signed ______ County St. Clair

ST. CLAIR

Copy for Illinois State Geological Survey NO ENVELOPE Index: 26-2N-10W

RECEIVED SEP 2 9 1993 Environmental Protection Agency MARION REGIONAL OFFICE

280

LOG OF WATER WELL

Property owner Monsanto Chem. Co. Well No. 15

Drilled by H. L. Watson (Merritt) Year Feb. 1941 ~~Mar. 1941~~

Formations passed through	Thickness	Depth of Bottom
No log	70	
Fine sand	5	75
Fine sand + gravel	5	80
Coarse sand + gravel	5	85
" " " "	5	90
Coarse sand	5	95
Coarse sand + gravel	5	100
" " " "	5	105
Sand + gravel	1½	106½

[Continue on back if necessary] T.D.

COUNTY No. 1945

Finished in ______ at ______ to ______ ft.

Cased with ______ inch ______ from 0 to ______ ft.

and ______ inch ______ from ______ to ______ ft.

Size hole below casing ______ inch. Static level from surf. 34' ft.

Tested capacity ______ gal. per min. Temperature ______ °F.

Water lowered to ______ ft. ______ in. in ______ hrs. ______ min.

Length of test ______ hrs. ______ min. Screen Johnson

Slot 60-80-100 Diam. 16" Length 25' Bottom set at ______ ft.

[Show location in Section Plat]

		X	

Township name ______ Elev. ______ Sec. 26

Description of location SW, NE Sec. 26 Twp. 2N

T2N, R10W Rge. 10W

Location by Groundwater Div.

Signed ______ County St. Clair

ST. CLAIR

NO ENVELOPE

Copy for Illinois State Geological Survey Index: 26-2N-10W

282

LOG OF WATER WELL

#16

Property owner Monsanto Chem. Co. Well No. ~~2~~

Drilled by Watson (Waly) Year June 1941

Formations passed through	Thickness	Depth of Bottom
Fill	10	10
Mud	8	18
Fine yellow sand → ?		
Sand	20'	38
Gravel	38	76
Fine gravel	5	81
Gray gravel	10	91
Gravel	10	101
Gravel	5	106

[Continue on back if necessary] TD = 106'

COUNTY No. 1946

RECEIVED
SEP 2? 1993
Environmental Protection Agency
MARION REGIONAL OFFICE

Finished in ______ at ______ to ______ ft.

Cased with ______ inch ______ from 0 to ______ ft.

and ______ inch ______ from ______ to ______ ft.

Size hole below casing ______ inch. Static level from surf. 30 ft.

Tested capacity ______ gal. per min. Temperature ______ °F.

Water lowered to ______ ft. ______ in. in ______ hrs. ______ min.

Length of test ______ hrs. ______ min. Screen Johnson

Slot ______ Diam. 16" Length 30' Bottom set at ______ ft.

[Show location in Section Plat]

		X	

Township name ______ Elev. ______ Sec. 26

Description of location SW, NE Sec. 26 Twp. 2N

T2N, R10W Rge. 10W

Location by Groundwater Div.

Signed ______ County St. Clair

ST. CLAIR

No ENVELOPE

Copy for Illinois State Geological Survey Index: 26-2N-10W

283

LOG OF WATER WELL

#17

Property owner Monsanto Chem. Co. Well No. 3

Drilled by H.C. Watson (Walz) Year July 1941

Formations passed through	Thickness	Depth of Bottom
Fill	10	10
Mud	8	18
Yellow sand	10	28
Gray sand (getting coarser)	35	63
#30 sand	15	78
#40 gravel	5	83
#50 "	5	88
#60 "	17	105 TD

[Continue on back if necessary]

Finished in ... to ... ft.

COUNTY No. 1947

Cased with ... inch ... from 0 to ... ft.

and ... inch ... from ... to ... ft.

Size hole below casing ... inch. Static level from surf. 30 ft.

Tested capacity ... gal. per min. Temperature ... °F.

Water lowered to ... ft. ... in. in ... hrs. ... min.

Length of test ... hrs. ... min. Screen Johnson

Slot 40 Diam. 16 Length 30' Bottom set at ... ft.

[Show location in Section Plat]

Township name ... Elev. ...

Description of location SW, NE Sec. 26, T 2 N, R 10 W

Sec. 26

Twp. 2 N

Rge. 10 W

Location by Groundwater Div. 6-7-

Signed ... County St. Clair

St. CLAIR No ENVELOPE Index: 26-2N-10W

Copy for Illinois State Geological Survey

Plotted on plat to 317

273

LOG OF WATER WELL

Property owner Monsanto Chem. Co. (80'5+E of main entrance gate) Well No. 19 (K.W. #2)

Drilled by Layne-Western (J. Sallee) Year Aug. 1948

Formations passed through	Thickness	Depth of Bottom
Cinder + clay fill	2	2
Brown sand	14	16
Brown + blue clay	2	18
Brown silty sand	27	45
Med gray sand	5	50
Med like clammy gray sand	5	55
Med. coarse sand + gravel, mixed rotten wood	6	61
Coarse sand + gravel	5	66
Black med sand, some gravel	7	73
Coarse sand + gravel	2	75
Coarse brown sand	5	80
Med. brownish gray sand + boulders	4	84
Coarse gray sand	6	90
" " " + gravel	18	108

[Continue on back if necessary]

Finished in ... to ... ft.

COUNTY No. 1948

Cased with ... inch ... from 0 to ... ft.

and ... inch ... from ... to ... ft.

Size hole below casing ... inch. Static level from surf. ... ft.

Tested capacity ... gal. per min. Temperature ... °F.

Water lowered to ... ft. ... in. in ... hrs. ... min.

Length of test ... hrs. ... min. Screen Shutter

Slot ... Diam. ... Length 25 Bottom set at ... ft.

[Show location in Section Plat]

Township name ... Elev. ...

Description of location NE NE Sec. 26, T 2 N, R 10 W

Sec. 26

Twp. 2 N

Rge. 10 W

Signed ... County St. Clair

St. CLAIR No ENVELOPE Index: 26-2N-10W

Copy for Illinois State Geological Survey

Plotted on photo 312

LOG OF WATER WELL

M.C. #

Property owner Monsanto Chemical Co. Well No. 20
East of Bldg. BI in plant 15' E. from R.R. spur. (K.W. # 3)
Drilled by Layne-Western (Milliven) Year 7-13-49

Formations passed through	Thickness	Depth of Bottom
Clay	1	1
Cinders	1	2
Clay	2	5
Sandy clay	26	31
Black fine sand	30	61
Med. sand, gray	13	74
Med. to coarse sand	5	79
Rock + coarse sand	2	81
Coarse sand	3	84
Coarse sand + gravel + small rocks	19	103

[Continue on back if necessary]

Finished in ______ at ______ to ______ ft.

COUNTY No. 1949

Cased with ______ inch from 0 to ______ ft.

and ______ inch from ______ to ______ ft.

Size hole below casing ______ inch. Static level from surf. ______ ft.

Tested capacity ______ gal. per min. Temperature ______ °F.

Water lowered to ______ ft. ______ in. in ______ hrs. ______ min.

Length of test ______ hrs. ______ min. Screen Shutter

Slot ______ Diam. ______ Length 25 Bottom set at ______ ft.

[Show location in Section Plat]

Township name ______ Elev. ______ Sec. 26

Description of location ... NE Sec 26 Twp. 2 N

T 2 N, R 10 W Rge. 10 W

Signed ______ County St. Clair

ST. CLAIR NO ENVELOPE

Copy for Illinois State Geological Survey Index: 26-2N-10W

Plotted on photo 1F39 ... 434

Log # 437

LOG OF WATER WELL

Property owner Midwest Rubber Reclaiming Co. Well No. 1
Drilled by Thorpe (Morgan) Year ?

Formations passed through	Thickness	Depth of Bottom
Sandy loam	10	10
Dry sand	14	24
Coarse sand	14	38
Coarse sand, some gravel	4	42
Fine sand	24	66
Ext. fine sand	8	74
Coarse sand + boulders	8	82
Very coarse sand + gravel	24	106

[Continue on back if necessary]

Finished in ______ to ______ ft.

COUNTY No. 437

Cased with ______ inch from 0 to ______ ft.

and ______ inch from ______ to ______ ft.

Size hole below casing ______ inch. Static level from surf. 28' 2" ft.

Tested capacity ______ gal. per min. Temperature ______ °F.

Water lowered to ______ ft. ______ in. in ______ hrs. ______ min.

Length of test ______ hrs. ______ min. Screen ______

Slot ______ Diam. ______ Length ______ Bottom set at ______ ft.

[Show location in Section Plat]

Township name ______ Elev. ______ Sec. 26

Description of location ______ Twp. 2 N

Rge. 10 W

Signed ______ County St. Clair Co

ST. CLAIR NO ENVELOPE

Copy for Illinois State Geological Survey Index: 26-2N-10W

LOG OF WATER WELL

Property owner Monsanto Chem. Co. Well No. Test well 2

Drilled by Layne-Western (F. Sallee) Year Feb. 1948

Formations passed through	Thickness	Depth of Bottom
Cinder fill	8	8
Hard green clay	4	12
Clay & black sand turning brown	3	15
Black & brown sand w/ clay	5	20
Brown sand	10	30
" " turning gray	5	35
Fine to med. gray sand	5	40
Med. gray sand	10	50
Med. to coarse gray sand	15	65
Med. gray sand	5	70
Sand & boulders, blue clay showing	5	75
Fine to med. sand, silt, few bould.s	5	80
Med. sand, some gravel	5	85
Med. to coarse sand & gravel	15	100
Coarse sand, gravel & boulders	8	108
On rock at 108		

[Continue on back if necessary]

Finished in ____ at ____ to ____ ft.

Cased with ____ inch COUNTY No. 1942 from 0 to ____ ft.

and ____ inch from ____ to ____ ft.

Size hole below casing ____ inch. Static level from surf. ____ ft.

Tested capacity ____ gal. per min. Temperature ____ °F.

Water lowered to ____ ft. ____ in. in ____ hrs. ____ min.

Length of test ____ hrs. ____ min. Screen ____

Slot ____ Diam. ____ Length ____ Bottom set at ____ ft.

[Show location in Section Plat]

Township name ____ Elev. 410 TOPO

Description of location NE, NE Sec. 26 T 2N, R 10W

Sec. 26 Twp. 2N Rge. 10W

Signed ____ County St. Clair

St. CLAIR No ENVELOPE Index: 26-2N-10W

Copy for Illinois State Geological Survey

(Same as well #4)

LOG OF WATER WELL

Property owner Monsanto Chem. Co. Well No. Test Hole 4

Drilled by Layne-Western (F. Sallee) Year Feb. 1948

Formations passed through	Thickness	Depth of Bottom
Cinder	1	1
Brown to yellow clay	9	10
Brown sandy clay	20	30
Brown sand clay showing	10	40
Brown graded sand	3	43
Med. sand, some gravel, clay showing	7	50
Fine graded sand & gravel	10	65
Med. sand, some coarse gravel - water at 68-70	5	70
Med. sand, some gravel	5	75
Fine to coarse sand & gravel, few clay	10	85
Medium fine sand, some gravel	5	90
Medium to coarse sand & gravel (rock) 19'8"	19'8"	109'8"
On rock at 109'8"		

[Continue on back if necessary]

Finished in ____ at ____ to ____ ft.

Cased with ____ inch COUNTY No. 1943 from 0 to ____ ft.

and ____ inch from ____ to ____ ft.

Size hole below casing ____ inch. Static level from surf. ____ ft.

Tested capacity ____ gal. per min. Temperature ____ °F.

Water lowered to ____ ft. ____ in. in ____ hrs. ____ min.

Length of test ____ hrs. ____ min. Screen ____

Slot ____ Diam. ____ Length ____ Bottom set at ____ ft.

[Show location in Section Plat]

Township name ____ Elev. ____

Description of location NE, NE Sec. 26 T 2N, R 10W

Sec. 26 Twp. 2N Rge. 10W

Signed ____ County St. Clair

St. CLAIR No ENVELOPE Index: 26-2N-10W

Copy for Illinois State Geological Survey

John C. Moore Corporation, Rochester, N. Y. Binder and holes in leaves, each Patented 1908. 306742

(575—5M—7-23)

TOWN Cahokia TOWNSHIP MAP No. 4W 10W

COMPANY Union Electric Light & Power

FARM 100 ft. S. of N. property line

AUTHORITY 258 ft. E. of Eastern Inner Harbor line. HOLE No. 1

ELEVATION 2 N Proj. 23

COLLECTOR DATE DRILLED

COUNTY NO. 1230 STRATA	THICKNESS FEET	THICKNESS IN.	DEPTH FEET	DEPTH IN.
Mud, black and fine sand	30		30	
Sand, fine	4		34	
Sand, coarse	2		36	
5% 1/8 in. gravel				
25% 1/4 in. gravel	2		38	
30% 2½ in. gravel	2		40	
Sand, coarse	8		48	
30% 1/8 to 1 in. gravel				
Sand, coarse	4		52	
10% 1/4 in. gravel				

County St. Clair Index No. 0414

ILLINOIS STATE DRILL RECORD Projected 23-2N-10W

John C. Moore Corporation, Rochester, N. Y. Binder and holes in leaves, each Patented 1908.

(575—5M—7-23)

TOWN Cahokia TOWNSHIP MAP No. 4W 10W

COMPANY Union Electric Light and Power

FARM 300 ft. S. of N. Property Line

AUTHORITY 250 ft. E. of Eastern Inner Harbor line HOLE No. 2

ELEVATION 2 N Proj. 23

COLLECTOR DATE DRILLED

COUNTY NO. 1231 STRATA	THICKNESS FEET	THICKNESS IN.	DEPTH FEET	DEPTH IN.
Sand, fine	10		10	
Sand, very fine	8		18	
Mud, black	6		24	
Mud, black and fine sand mixed	11		33	
Sand, fine. 10% 1/4 in. gravel	5		38	
Sand, coarse. 15% 1/2 in. gravel	5		43	
Sand, coarse 20% 1/2 in. gravel	5		48	
Sand, fine	5		53	
Sand, coarse. Pieces of soapstone	5		58	
Sand, coarse 5% 1/4 in. gravel	8		66	
Sand, coarse 10% 1/2 in. gravel	6		72	
Sand, coarse 20% 4 in. gravel	4		76	
Sand, coarse, 20% 3/4 in. gravel	15		91	
Sand, coarse	10		101	
Minus 73.66 Rock				

County St. Clair Index No.

ILLINOIS STATE DRILL RECORD Projected 23-2N-10W

TOWN E. St. Louis-Township Monsanto P. O. Map No. 4W
COMPANY F. Thorpe- Engineer R. 10W
FARM Evans-Wallower Zinc Co. No. 2 T. 2N Sec. 24 ?
AUTHORITY F. Thorpe
ELEVATION
COLLECTOR DATE DRILLED March 1929
CONFIDENTIAL

STRATA COUNTY NO. 1740	Thickness Feet	Thickness In.	Depth Feet	Depth In.
Subsoil & clay	16		16	
Sand, extreemely fine	11		27	
Sand, very fine, loamy	8		35	
Sand, very fine	11		46	
Sand, fine	6		52	
Sand, very fine	3		55	
Sand, fine, gritty	7		62	
Boulders up to 4" with some sand	5		67	
Regular building sand	14		81	
Sand, medium coarse	2		83	
Sand, very coarse	19		102	

"During the month of March, 1929, I installed a porous concrete well 30" I.D. and 40" O.D. at the plant of the Evans-Wallower Zinc Co. at Monsanto P.O., East St. Louis, Ill. and the above is the log of all the strata we went through in Well #2.

"The static level of water varies with the river level."
(Letter of F. Thorpe rec'd. 4-3-29)

NO ENVELOPE

County St. Clair Index No. 04W24
T.—DRILL RECORD 24-2N-10W
17893 4M 5 29 26

TOWN East St. Louis WNSHIP Map No. 4W
COMPANY Thorpe Concrete Well Co. R. 10W
FARM Certain-teed Products No. 3 T. 2 N Sec. 24
AUTHORITY written log
ELEVATION 416 topo.
COLLECTOR Ireland DATE DRILLED 4-34
CONFIDENTIAL 18th and Broadway

No.	STRATA COUNTY NO. 1739	Thickness Feet	Thickness In.	Depth Feet	Depth In.
	Cinder fill	6		6	
	Gumbo	4		10	
	Soil, sandy	7		17	
	Sand, fine	10		27	
	Sand, extremely fine	13		40	
	Sand, fine, loamy	13		53	
	Sand, fine, gritty	7		60	
	Clay, blue	4		64	
	Sand, quick	26		90	
	Sand, fine	2		92	
	Sand, gritty	9		101	
	Gravel, fine	6		107	
	Sand, coarse	2		109	
	Boulders 2" to 10"	7		116	
	Baits drilled 3 wells	1-21		120	
		7-17		120	
		11-17		119	

NO ENVELOPE

County ST. CLAIR Index No. 04W 24
T.—DRILL RECORD 24-2N-10W
47327—10M—4-35 4 Illinois Geological Survey, Urbana.

(36911—50M—2-67)27-0 2

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

	Thickness	Top	Bottom
Gravel, sandy	1	0	1
Clay with sand lenses	2	1	3
Silty sand	3	3	6
Fat clay	1½	6	7½
Sandy silt	6	7½	13½
Very fine sand	5	13½	18½
Fine sand	6	18½	24½
Clay	1½	24½	26
Silty sand	4	26	30
No record		30	83
Fine to medium sand	10	83	93
Fine sand	6	93	99
Medium to coarse, gravely sand	5	99	104
Fine to coarse sand	5	104	109
Medium sand	5	109	114
Medium to fine sand	5	114	119
Medium sand	5	119	124
Fine to coarse sand	3	124	127
Refusal			

**1.62 miles N of 38° 35', 3600' W of 90° 10'

*Corps of Engineers

NO ENVELOPE

COMPANY
FARM *Waterways Experiment Station NO. W-77
DATE DRILLED 1952-53 COUNTY NO. 1923
AUTHORITY
ELEVATION
LOCATION **118' L.S.of ℄ of Levee, E side L. & S. Dist. L Sta.1127+50
COUNTY ST. CLAIR

23-2N-10W

331

South end of Warehouse

LOG OF WATER WELL

Plotted on Cahokia Quad.

Property owner A+P Food Stores Mississippi Ave. Well No.

Drilled by H. L. Watson (Bud Graves) Year June 1946

Formations passed through	Thickness	Depth of Bottom
Gumbo	30	30
Quicksand + gravel	5	35
Medium sand + gravel	10	45
Fine sand	10	55
Medium sand	5	60
Fine sand	5	65
Mud	3	68
Medium sand + gravel	7	75
Good sand	5	80 T.D.
Fine bottom		

[Continue on back if necessary]

Finished in ______ at ______ to ______ ft.

Cased with ______ inch from 0 to ______ ft.

and ______ inch from ______ to ______ ft.

COUNTY No. 1925

Size hole below casing ______ inch. Static level from surf. 25' ft.

Tested capacity ______ gal. per min. Temperature ______ °F.

Water lowered to ______ ft. ______ in. in ______ hrs. ______ min.

Length of test ______ hrs. ______ min. Screen ______

Slot ______ Diam. 6" Length 10' Bottom set at ______ ft.

[Show location in Section Plat]

Township name ______ Elev. ______ Sec. 23

Description of location SE SW Sec 23 Twp. 2N

T 2N R 10W ... Rge. 10W

Position by Groundwater Div.

Signed ______ County St. Clair

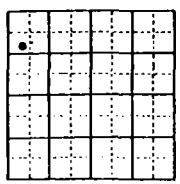
ST.CLAIR 23-2N-10W

Copy for Illinois State Geological Survey Index:

No ENVELOPE

PERMIT # NF 08825	Thickness	Top	Bottom
A 4" test hole was first drilled to a depth of 111', then filled in with sand and later re-drilled with a bigger bit. Both records follow.			
TEST HOLE			
Clay		0	11
Silty sand brown		12	21
Fine sand brown		22	30
Fine sand gray		31	41
Medium sand gray		42	51
Coarse sand gray with pea gravel		52	56
Coarse sand gray with pea gravel		57	61
Coarse sand gray with pea gravel		62	86
Very coarse sand gray with 3/8" gravel		87	91
Very coarse sand gray with ½" gravel		92	96
Very coarse sand gray with ½" gravel		97	101
Very coarse sand gray with ½" gravel		102	104
Very coarse sand gray with ½" gravel		105	111
			TD
WELL RECORD			
Clay		0	18
Sand coarse gray			20
Sand coarse gray with gravel			25
Sand fine			30
Sand coarse gray with gravel			35
Sand coarse gray with gravel			40
Sand coarse gray with 1" gravel			45
Sand coarse gray with 1" gravel		55	60
Sand coarse gray with 3/4" gravel		65	70

COMPANY Luhr Brothers, Inc.
FARM Cerro Copper & Brass Co. NO. 1
DATE DRILLED July 10, 1970 COUNTY NO. 3208
AUTHORITY Company
ELEVATION
LOCATION 1000' N line, 400' W line of NW
COUNTY ST. CLAIR



26-2N-10W

	Thickness	Top	Bottom
Sand very coarse gray			75
Sand very coarse gray with cobbles to 5"		80	110½ TD
Well Casing:			
Material - Steel coated with bituminous			
Diameter: 20" outside diameter			
Length - 78.73'			
Wall Thickness - .075			
Final Casing Elevation Above Grade: 1'			
Size of Drilled Hole:			
40" to 20'			
38" to bottom			
Well Screen:			
Material - Stainless steel #304			
Diameter - 20" nominal			
Length - 31.82			
Slot Size - .100			
Type Make - UOP Johnson			
Depth of Screen set at 110.55'			
Gravel Filter:			
Used 23 tons Muscatine, 1/16" - 3/16" No. 3			
Wall Thickness - 8½"			
Feet Above Screen - 26'			
Static Level: 23.86'			
S.S. # 57106.			

COUNTY Luhr Bros., Inc. Cerro Copper & Brass Co. #1
ST. CLAIR 26-2N-10W

(2840—50M—12-64) 2

374

ILLINOIS GEOLOGICAL SURVEY, URBANA

go 1

	Thickness	Top	Bottom
Soil	1'6"		1'6"
Sand	34		35'6"
Fine gravel	6		41'6"
Gravel & sand	24		65'6"
Gravel & boulders	13		84'6"
Gravel	5'6"		90
Coarse gravel & boulders	18		108

Tested 1400 gallons per minute.

Water stands 12'6" from surface of ground.

Water stands 26'6" when pumping 1400 gallons per minute.

Size of well 24".

20 cubic yards of gravel.

Material used in well:
50' of 38" Pit,
106'8" of 24" which includes 58' of 24" Shutter Screen & 48'4" of 24" Pit.

Kind of seal used Steel Plug.

*50'N and 50'E of crossing of Alton & Southern R.R. & Falling Springs Rd.

COMPANY Layne & Bowler Company
FARM Monsanto Chemical Works NO. 1
DATE DRILLED May 8, 1920 COUNTY NO. 1741
AUTHORITY Layne & Bowler Co.
ELEVATION 410' ±
LOCATION *
COUNTY ST. CLAIR

Projected 26-2N-10W

LOG OF WATER WELL

Property owner Monsanto Chem. Co. Well No. #1 (first well)

Drilled by Layne-Western (F. Sallee) Year Feb. 1948

Formations passed through	Thickness	Depth of Bottom
Soil Fill	1	1
Cinder fill	4	5
Cinders, yellow, green clay	5	10
Cinders + fine black sand	5	15
Fine black sand + clay	5	20
" " " , streak red gray sand	5	25
Fine black mucky sand, sand & gravel throughout	20	45
Red Coarse gray sand	10	55
Coarse gray sand	5	60
Fine, pebbly gray sand and boulders from 67½ to	14	74
Sand + gravel, packed w/ much fine sand	3	77
Packed sand, gravel + boulders	3	80
Packed sand, gravel + Boulders	13	93
Sand + Boulders	9	102
		TD
(Formation in general is very tight)		

[Continue on back if necessary]

Finished in ____ at ____ to ____ ft.

Cased with ____ inch from 0 to ____ ft.

and ____ inch from ____ to ____ ft.

Size hole below casing ____ inch. Static level from surf. ____ ft.

Tested capacity ____ gal. per min. Temperature ____ °F.

Water lowered to ____ ft. ____ in. in ____ hrs. ____ min.

Length of test ____ hrs. ____ min. Screen ____

Slot ____ Diam. ____ Length ____ Bottom set at ____ ft.

[Show location in Section Plat]

Township name ____ Elev. 410 TOPO Sec. 26

Description of location SW, NE Sec. 26, T 2 N, R 10 W Twp. 2 N

Rge. 10 W

Signed ____ County St. Clair

Copy for Illinois State Geological Survey NO ENVELOPE Index: 26-2N-10W

COUNTY NO. 1941

287

LOG OF WATER WELL

Property owner Lewin-Mathes Well No.

Drilled by H. L. Watson (Moll) Year June 1948

Formations passed through	Thick-ness	Depth of Bottom
Topsoil	3	3
Fine sand	12	15
" "	20	35
" " + gravel	10	45
Med sand + gravel	2	47
Log	1	48
Med. Sand + gravel	4	52
" " " " + rock	10	62
" " " "	8	70
" " " "	5	75
" " " " + rock	5	80
Coarse sand	5	85
Coarse sand + rock	5	90
Coarse sand	5	95
Boulder	1	96
Coarse sand + rock	5	101

[Continue on back if necessary]

COUNTY No. 1935

Finished in ______ to ______ ft.

Cased with ______ inch ______ from 0 to ______ ft.

and ______ inch ______ from ______ to ______ ft.

Size hole below casing ______ inch. Static level from surf. ______ ft.

Tested capacity ______ gal. per min. Temperature ______ °F.

Water lowered to ______ ft. ______ in. in ______ hrs. ______ min.

Length of test ______ hrs. ______ min. Screen ______

Slot ______ Diam. ______ Length ______ Bottom set at ______ ft.

[Show location in Section Plat]

Township name ______ Elev. ______ Sec. 26

Description of location NE, SW Sec. 26 Twp. 2

T2N, R10W Rge. 10

Location by Brauer (Water Survey)

Signed ______ County St. Clair

ST. CLAIR NO ENVELOPE

Copy for Illinois State Geological Survey Index: 26-2N-10W

286

On Cahokia Quad.

LOG OF WATER WELL

Property owner Lewin-Mathes - Monsanto, Ill. Well No.

Drilled by H. L. Watson (Graves) Year Feb. 1947

Formations passed through	Thick-ness	Depth of Bottom
Fine sand	70	70
Fine sand + gravel	8	78
Good formation	26	104 TD

COUNTY No. 1936

[Continue on back if necessary]

Finished in ______ at ______ to ______ ft.

Cased with ______ inch ______ from 0 to ______ ft.

and ______ inch ______ from ______ to ______ ft.

Size hole below casing ______ inch. Static level from surf. ______ ft.

Tested capacity ______ gal. per min. Temperature ______ °F.

Water lowered to ______ ft. ______ in. in ______ hrs. ______ min.

Length of test ______ hrs. ______ min. Screen ______

Slot 30 Diam. 12" Length 26'5" Bottom set at ______ ft.

[Show location in Section Plat]

Township name ______ Elev. ______ Sec. 26

Description of location NE, SW Sec. 26, Twp. 2N

T2N, R10W Rge. 10W

Location by Brauer (Water Survey)

Signed ______ County St. Clair

ST. CLAIR NO ENVELOPE

Copy for Illinois State Geological Survey Index: 26-2N-10W

(36941—50M—2-67)27-0

ILLINOIS GEOLOGICAL SURVEY, URBANA

INDUSTRIAL Permit #NF4849	Thickness	Top	Bottom
Yellow brown clay		0	10
Fine sand brown		10	25
Medium coarse sand brown		25	30
Coarse sand brown with pea gravel		30	35
Coarse sand brown		35	40
Medium coarse sand brown		40	55
Medium fine sand brown		55	60
Fine sand brown		60	70
Very coarse sand gray with 1½" gravel		70	80
Very coarse sand gray with ¼" gravel		80	85
Very coarse sand gray with 3/4" gravel		85	90
Very coarse sand gray with ½" gravel		90	95
Very coarse sand gray with 3/8" gravel		95	100
Very coarse sand gray with 1" gravel		100	105
Very coarse sand gray with 3/4" gravel		105	107
Very coarse sand gray with ¼" gravel		107	113
Very coarse sand gray with ½" gravel		113	116
			TD

Size of hole 38"
Casing: 88" - 18" outside diameter steel
Casing elevation 2' above grade
Static water level 36.9' top of casing
24 tons gravel pack 11" wall 45' above screen
Screen: Johnson Stainless Steel 18" nominal diameter. Length 30' set at 116'
Slot size: .060'
Two well 300' apart were drilled under Permit #NF4849 S.S. # 55984
NO ENVELOPE
* North Reservoir

COMPANY Luhr Brothers, Inc.
FARM Midwest Rubber Reclaiming Co. 10
DATE DRILLED September 3, 1968 COUNTY NO. 2856
AUTHORITY Luhr Bros. Inc.
ELEVATION
LOCATION Lot 209 Third Subdivision of Cahokia Commonfields
COUNTY ST. CLAIR 23?-2N-10 W

(36941—50M—2-67)27-0

ILLINOIS GEOLOGICAL SURVEY, URBANA

INDUSTIRAL Permit #NF4849	Thickness	Top	Bottom
Brown Clay		0	5
Brown silty sand		5	20
Fine sand brown		20	25
Fine sand gray		25	30
Coarse sand gray with pea gravel		30	35
Medium coarse sand gray		35	40
Coarse sand gray		40	45
Medium fine sand gray		45	55
Very coarse sand gray with pea gravel		55	60
Medium coarse sand gray		60	65
Very coarse sand gray with 3/4" gravel		65	70
Medium coarse sand gray with pea gravel		70	75
Very coarse sand gray with 3/4" gravel		75	110
Very coarse sand gray with 1" gravel		110	115.5
			TD

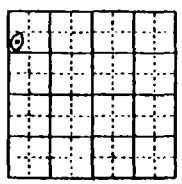
Size of hole 38"
Casing: 88.70' - 18" outside diameter steel
Casing elevation 3.2' above grade
Static water level 37'
26.5 tons gravel pack 11" wall 55' above screen.
Screen: Johnson Stainless Steel 16" nominal diameter. Length 30' set at 115.5'
Slot size: .060
Two wells 300' apart were drilled under Permit #NF4849
NO ENVELOPE
* Southwest Reservoir S.S.#55983

COMPANY Luhr Brothers, Incorparted.
FARM Midwest Rubber Reclaiming Co. 11
DATE DRILLED September 6, 1968 COUNTY NO. 2857
AUTHORITY Luhr Bros. Inc.
ELEVATION
LOCATION Lot 209 Third Subdivision of Cahokia Commonfields
COUNTY ST. CLAIR 23?-2N-10W

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Boring No. 1 at Pier No. 4			
Elevation 400'± MSL			
Water	8-10		8-10
Black Muck	13-0		21-10
Black muck mixed with sand	6-0		27-10
River sand	1-0		28-10
At this depth 20' hole was abandoned acc't casing breaking.			
NOTE: At 8', 12', 13', and 19' depths old wooden hulls were found (Pine Timber.)			
Boring did not reach rock.			
Reference drawings 4108 p2 -1 sheets 1 and 2, and 4108 p2 -3 sheet 2 in map files.			
Cahokia quadrangle			

COMPANY St. Louis City, Mo. Pier No. 4
FARM MacArthur (Municipal) Bridge NO. 1
DATE DRILLED 1909 COUNTY NO. 1866
AUTHORITY Boller & Hodge, Consulting Engineers
ELEVATION 400'± MSL
LOCATION SW.,NW.,NW.
COUNTY St. Clair

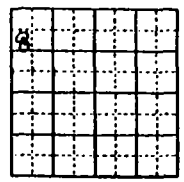


23-2N-10W

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Boring No. 2 at Pier No. 4 COUNTY No. 1867			
Elevation 400'± MSL			
Water	7-7		7-7
Black muck mixed with sand	17-0		24-7
Struck old sunken oak timbers			
Black muck mixed with sand	1-0		25-7
Struck old sunken oak timbers			
Alluvial sand mixed with fine gravel	10-0		35-7
Fine sand and gravel	41-2		76-9
Elevation 323'± MSL Limestone rock (Boulder)			
Boring No. 4 at Pier No. 4 COUNTY No. 1868			
Elevation 406'± MSL			
Water	17-1		17-1
Black muck mixed with sand	10-2		27-3
Recent alluvial sands	4-10		32-1
Alluvial sands and fine gravel	70-4		102-5
Struck boulder (broken up and drill went down)			
Alluvial sands with drift of gravel	16-8		119-1
Elevation 287'± MSL solid bedrock			
Reference drawings 4108 p2 -1 sheets 1 and 2, and 4108 p2 -3 sheet 2 in map files.			
Cahokia quadrangle			

COMPANY St. Louis City, Mo. Pier No. 4
FARM MacArthur (Municipal) Bridge NO. 2 & 4
DATE DRILLED 1909 COUNTY NO.
AUTHORITY Boller & Hodge, Consulting Engineers
ELEVATION
LOCATION SW.,NW.,NW.
COUNTY St. Clair



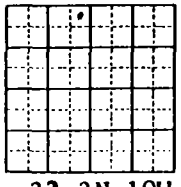
23-2N-10W

(2840—50M—12-64)

ILLINOIS GEOLOGICAL SURVEY, URBANA

	Thickness	Top	Bottom
Bridge Boring #H-1 Station 52+68 Centerline			
Topsoil			1
Very soft gray-mottled sandy clay			7
Medium brown sandy clay			12
Medium gray fatty clay			22
Medium very fine gray sand			29
Dense fine gray sand			32
Medium fine gray sand			37
Dense fine gray sand			42
Medium fine gray sand			44.5
Very dense fine gray sand			49.5
Dense fine gray sand			52
Medium fine gray sand with small well graded gravel			62
Very dense gray sand			67
Dense gray sand			69.5
Very dense fine gray sand			72
Dense very fine gray silty sand			77
Dense very fine gray silty sand with rounded to sub-aug poorly graded gravel			79
Very dense fine gray silty sand			84.5
Dense fine gray silty sand			87
Medium coarse gray sand with occasional small well graded gravel			99.5
Loose coarse gray sand with occasional small well graded gravel			102
Medium coarse gray sand with occasional small well graded gravel			117

MPANY Illinois Division of Highways
IM FAI 55 & 70 Interchange* NO. H-1
TE DRILLED April 1963 COUNTY NO. 23824
THORITY Log by Division of Highways
EVATION 404.7' G.L.
CATION NE NE NW
JNTY ST. CLAIR Proj. 23-2N-10W



(23710—30M—9-

Strata	Thickness	Top	Bottom
Medium gray sand with rounded to sub-angular poorly graded gravel			127
Rock (Limestone)			130
			T.D.

Typed by Engineering Geology

Copy of Highway Division log filed in Groundwater Section

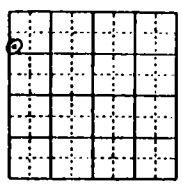
NO ENVELOPE
*FAI 55 & 70 Interchange Complex at East St. Louis

COUNTY Ill. Div.of Highways #H-1 FAI 55 & 70 Interchange*
ST. CLAIR Proj. 23-2N-10W

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Boring No. 3 at Pier No. 4			
Elevation 406'+ MSL			
Water	11-1		11-1
Black muck mixed with sand	9-6		20-7
Struck old sunken hull (oak timber) about 4" thick.			
Recent alluvial sands	4-2		24-9
Struck old sunken hull (oak timber)			
Alluvial sands	74-0		98-9
Struck bolder of limestone rock	1-2		99-11
Drilled through and broken up.			
Alluvial sands with drifts of gravel.	21-1		121-0
Elevation 285'+ MSL. Solid limestone bedrock. Drilled into rock about 8 inches.			
Reference drawings 4108 p2-1 sheets 1 and 2. and 4108 p2-3 sheet 2 in map files.			
Cahokia quadrangle			

COMPANY St. Louis City, Mo. Pier No. 4
FARM MacArthur (Municipal) Bridge NO. 3
DATE DRILLED 1909 COUNTY NO. 1869
AUTHORITY Boller & Hodge, Consulting Engineers
ELEVATION 406'+ MSL
LOCATION SW.,NW.,NW.
COUNTY St. Clair

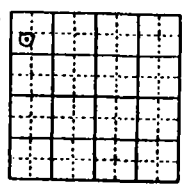


23-2N-10W

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Boring No. 5 at Pier No. 4 COUNTY No. 1870			
Elevation 406'± MSL			
Water	9-10		9-10
Black muck mixed with sand	10-0		19-10
Recent alluvial sands	8-0		27-10
Coarse alluvial sands	16-0		43-10
Coarse sand and gravel	21-0		64-10
Alluvial sands with drifts of gravel	54-2		119-0
Elevation 287'± MSL. Solid limestone bedrock.			
Boring No. 6 at Pier No. 4 COUNTY No. 1871			
Elevation 406'± MSL.			
Water	12-7		12-7
Black muck mixed with sand	14-7		27-2
Struck old barge or boat (oak timber)			
Recent alluvial sand	13-0		40-2
Coarse sand and gravel	1-5		41-7
Coarse sand with drifts of gravel	79-0		120-7
Elevation 285'± MSL. Solid limestone bedrock			
Reference drawings 4108 p2-1 sheets 1 and 2 and 4108 p2-3 sheet 2 in map files.			
Cahokia quadrangle			

COMPANY St. Louis City, Mo. Pier No. 4
FARM MacArthur (Municipal) Bridge NO. 5 & 6
DATE DRILLED 1909 COUNTY NO.
AUTHORITY Boller & Hodge, Consulting Engrs.
ELEVATION
LOCATION SW.,NW.,NW.
COUNTY St. Clair



23-2N-10W

ILLINOIS GEOLOGICAL SURVEY, URBANA

MIT # NF 08825	Thickness	Top	Bottom
" test hole was first drilled to a epth of 111', then filled in with and and later re-drilled with a igger bit. Both records follow.			
T HOLE			
y		0	11
ty sand brown		12	21
e sand brown		22	30
e sand gray		31	41
ium sand gray		42	51
rse sand gray with pea gravel		52	56
rse sand gray with pea gravel		57	61
rse sand gray with pea gravel		62	86
y coarse sand gray with 3/8" gravel		87	91
y coarse sand gray with ½" gravel		92	96
y coarse sand gray with ½" gravel		97	101
y coarse sand gray with ½" gravel		102	104
y coarse sand gray with ½" gravel		105	111 TD
. RECORD			
y		0	18
l coarse gray			20
l coarse gray with gravel			25
l fine			30
l coarse gray with gravel			35
l coarse gray with gravel			40
l coarse gray with 1" gravel			45
l coarse gray with 1" gravel		55	60
l coarse gray with 3/4" gravel		65	70

Y Luhr Brothers, Inc.
Cerro Copper & Brass Co. NO. 1
RILLED July 10, 1970 COUNTY NO. 3208
ITY Company
ION
N 1000' N line, 400' W line of NW
ST. CL R

26-2N-10W

ILLINOIS GEOLOGICAL SURVEY, URBANA

	Thickness	Top	Bottom
Sand very coarse gray			75
Sand very coarse gray with cobbles to 5"		80	110½ TD

Well Casing:
Material - Steel coated with bituminous
Diameter: 20" outside diameter
Length - 78.73'
Wall Thickness - .075

Final Casing Elevation Above Grade: 1'

Size of Drilled Hole:
40" to 20'
38" to bottom

Well Screen:
Material - Stainless steel #304
Diameter - 20" nominal
Length - 31.82
Slot Size - .100
Type Make - UOP Johnson

Depth of Screen set at 110.55'

Gravel Filter:
Used 23 tons Muscatine, 1/16" - 3/16"
No. 3
Wall Thickness - 8½"
Feet Above Screen - 26'

Static Level: 23.86'

S.S. # 57106.

C Y Luhr Bros., Inc. Cerro Copper & Brass Co #1
ST. CLAIR
26-2N-10W

(2840—50M—12-81)

ILLINOIS GEOLOGICAL SURVEY, URBANA

	Thickness	Top	Bottom
l	1'6"		1'6"
l	34		35'6"
e gravel	6		41'6"
vel & sand	24		65'6"
vel & boulders	13		84'6"
vel	5'6"		90
rse gravel & boulders	18		108

ted 1400 gallons per minute.

er stands 12'6" from surface of ground.

er stands 26'6" when pumping 1400 gallons per minute.

e of well 24".

cubic yards of gravel.

terial used in well:
0' of 38" Pit,
06'8" of 24" which includes 58' of 24" Shutter Screen & 48'4" of 24" Pit.

d of seal used Steel Plug.

0'N and 50'E of crossing of Alton & Southern R.R. & Falling Springs Rd.

PANY Layne & Bowler Company
Monsanto Chemical Works NO. 1
DRILLED May 8, 1920 COUNTY NO. 1741
IORITY Layne & Bowler Co.
ATION 410' ±
ATION N
NTY ST. C R

Projected 26-2N-10W

374

LOG OF WATER WELL

Test well

Property owner Monsanto Chem. Co. Well No. #1

Drilled by Layne-Western (F. Salle) Year Feb. 1948

Formations passed through	Thickness	Depth of Bottom
Soil Fill	1	1
Cinder fill	4	5
Cinders, flue, green clay	5	10
Cinders + fine black sand	5	15
Fine black sand + clay	5	20
" " " , streak med. gray sand	5	25
Fine black muddy sand [illegible]	20	45
Med. Coarse gray sand	10	55
Coarse gray sand	5	60
Fine, pebbly gray-brown sand boulder [illegible]	14	74
Sand + gravel, plugged w/ much fine sand	3	77
Packed sand, gravel + boulders	3	80
Packed sand, gravel + boulders	13	93
Sand + boulders	9	102
(Formation in general is very tight)		TD

(Continue on back if necessary)

Finished in ______ at ______ to ______ ft.

COUNTY No. 1941

Cased with ______ inch ______ from 0 to ______ ft.

and ______ inch ______ from ______ to ______ ft.

Size hole below casing ______ inch. Static level from surf. ______ ft.

Tested capacity ______ gal. per min. Temperature ______ °F.

Water lowered to ______ ft. ______ in. in ______ hrs. ______ min.

Length of test ______ hrs. ______ min. Screen ______

Slot ______ Diam. ______ Length ______ Bottom set at ______ ft.

(Show location in Section Plat)

Township name ______ Elev. 410 TOPO Sec. 26

Description of location SW NE Sec. 26, T2N, R10W Twp. 2N

Rge. 10W

Location [illegible] wastewater [illegible]

Signed ______ County St. Clair

ST. CLAIR

For Illinois State Geological Survey NO ENVELOPE Index: 26-21 .OW

(32844—50M—9-55)

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
edish sandy and blue silt		0	15
rey sand little silt		15	20
rey sand		20	25
lue and grey sand		25	30
ine grey sand		30	35
ine grey sand and blue silt		35	40
ine blue and grey sand		40	45
o recovery wash samole. Fine blue and grey sand		40	50
o recovery wash sample. fine blue and grey sand.		50	55
ine blue sand, No recovery		55	60
lue sand and wood no recovery		60	65
rey and blue sand. No recovery		65	70
ine blue sand. No recovery		70	75
ine blue sand. No recovery		75	80
edium blue sand. No recovery		80	85
ixed grey and blue sand no recovery		85	90
ixed grey and blue sand. No recovery		90	95
ixed blue and grey sand. Could not drive sample Barrell. Felt like gravel		95	100
lue and grey sand. No spoon sample taken.		100	105
lue and redish sand. no spoon sample taken. Drove casing to 110'4". Set Johnson well screen at 108'11". Could not get any deeper as sand was running under casing.		105	110
otal Depth			110'4" TD

Location plat filed.

S.S. # 29900

NY Wabash Drilling Co.
Monsanto Chemical Co. NO. SR-2
RILLED November 1956 COUNTY NO. 1987
RITY Wabash Drilling Co.
TION 412.5' refusal (MSL)
ON 680'W of 90° 10'W longitude, 4310'N of 38° 35' north latitude.
Y ST. CL Projected 26- 2N-10W

SC Jack Bufe (Co Kelly)   Photo 1F-88

Plotted on Photo

LOG OF WATER WELL

Property owner Monsanto Chem. Co. (Plant "B") Well No. 12

Drilled by H. L. Watson Year

Formations passed through	Thickness	Depth of Bottom
No log	20	
Fine sand	5	25
Coarse sand + gravel	5	80
Coarse sand + gravel	5	85
" " " "	5	90
" " " "	5	95
" " " "	5	100
Sand + gravel	5	105
" " "	5	110
Fast Boulders	2	112

(Continue on back if necessary)

Finished in at to ft.

COUNTY No. 1944

Cased with inch from 0 to ft.

and inch from to ft.

Size hole below casing inch. Static level from surf. 39'6" ft.

Tested capacity 1250 gal. per min. Temperature °F.

Water lowered to ft. in. in hrs. min.

Length of test hrs. min. Screen Johnson

Slot 60-80-100 Diam. 16 Length 27½' Bottom set at ft.

(Show location in Section Plat)

Township name Elev. Sec. 26

Description of location SE, NE Sec. 26, T2N, R10W   Twp. 2N

Rge. 10W

Location by Groundwater [illegible]

Signed County St. Clair

ST. CLAIR

Copy for Illinois State Geological Survey   No ENVELOPE   Index: 26-2N 10W

1589

435

Notes in Calculation Proof

LOG OF WATER WELL

Property owner Midwest Rubber Reclaiming Co. Well No. 2

Drilled by Thorpe (Morgan) Year ?

Formations passed through	Thickness	Depth of Bottom
Sandy soil	27	27
Fine silt	8	35
Coarse sand + pea gravel	8	43
Fine sand + silt	21	64
Very coarse sand	6	70
Coarse sand, wood, gravel, veg., etc.	11	81
Very coarse sand	5	86
Very coarse sand + gravel	28	114

[Continue on back if necessary]

Finished in ______ to ______ ft.

COUNTY No. 1938

Cased with ______ inch ______ from 0 to ______ ft.

and ______ inch ______ from ______ to ______ ft.

Size hole below casing ______ inch. Static level from surf. 25' 6" ft.

Tested capacity ______ gal. per min. Temperature ______ °F.

Water lowered to ______ ft. ______ in. in ______ hrs. ______ min.

Length of test ______ hrs. ______ min. Screen ______

Slot ______ Diam. ______ Length ______ Bottom set at ______ ft.

[Show location in Section Plat]

Township name ______ Elev. ______ Sec. 26

Description of location ______ Twp. 2N

Rge. 10W

Location by ...

Signed ______ County St. Clair

ST. CLAIR

Copy for Illinois State Geological Survey No ENVELOPE Index: 26-2N-10W

Ver. Cy #435

LOG OF WATER WELL

See Mr. Luther

Property owner Midwest Rubber Reclaiming Co Well No. 3

Drilled by Thorpe (Morgan) Year Mar. 1951

Formations passed through	Thickness	Depth of Bottom
Hard fill	3	3
Fine dry sand + silt	34	37
Med. fine sand very dirty	14	51
Med. coarse sand, dirty	11	62
Building sand some fine gravel	9	71
Clean coarse sand	23	94
Coarse sand + boulders	8	102
Med. coarse sand	10	112

[Continue on back if necessary]

Finished in ______ to ______ ft.

COUNTY No. 1939

Cased with ______ inch ______ from 0 to ______ ft.

and ______ inch ______ from ______ to ______ ft.

Size hole below casing ______ inch. Static level from surf. 35' Apr. 18 ft.

Tested capacity ______ gal. per min. Temperature ______ °F.

Water lowered to ______ ft. ______ in. in ______ hrs. ______ min.

Length of test ______ hrs. ______ min. Screen ______

Slot ______ Diam. ______ Length ______ Bottom set at ______ ft.

[Show location in Section Plat]

Township name ______ Elev. ______ Sec. 26

Description of location ______ Twp. 2N

Rge. 10W

Location by ...

Signed ______ County St. Clair

ST. CLAIR

Copy for Illinois State Geological Survey No ENVELOPE Index: 26-2N-10W

322

American Zinc Co - Monsanto

LOG OF WATER WELL

[...]perty owner United Engineers + Const. Inc. E. St. Louis Well No. 6

[Dri]lled by H. L. Watson (Vandermill) Year Nov. 1940

Formations passed through	Thickness	Depth of Bottom
Cinder + Mud	15	15
Fine sand	60	75
good water bearing formation	30	105
Quicksand to soapstone	2	107

Abandoned

[Continue on back if necessary]

[Fi]nished in ______ at ______ to ______ ft.

[Ca]sed with ______ inch COUNTY No. 1926 from 0 to ______ ft.

and ______ inch ______ from ______ to ______ ft.

[Si]ze hole below casing ______ inch. Static level from surf. 34 ft.

[Te]sted capacity 1500 gal. per min. Temperature ______ °F.

[Wa]ter lowered to ______ ft. ______ in. in ______ hrs. ______ min.

[Le]ngth of test ______ hrs. ______ min. Screen Cook

[Sl]ot 120 Diam. 16 Length 30' Bottom set at ______ ft.

[Show location in Section Plat]

[To]wnship name ______ Elev. ______ Sec. 23

[D]escription of location SE, SE Sec 23 Twp. 2N

T 2N, R 10 W ...... Rge. 10 W

Location by Groundwater Div.

[S]igned ______ County St. Clair

ST. CLAIR

[C]opy for Illinois State Geological Survey No Envelope Index? 23-2N-10W

251

LOG OF WATER WELL

Property owner United Engineers Well No. 7

American Zinc Co. Monsanto, Ill.

Drilled by Watson (Moretti + Claridge) Year Jan. 1942

Formations passed through	Thickness	Depth of Bottom
Dirt	5	
Fine sand	45	50
Coarse sand	25	75
gravel	30	105

COUNTY No. 1929

[Continue on back if necessary]

Finished in ______ at ______ to ______ ft.

Cased with ______ inch ______ from 0 to ______ ft.

and ______ inch ______ from ______ to ______ ft.

Size hole below casing ______ inch. Static level from surf. 33' 6" ft.

Tested capacity ______ gal. per min. Temperature ______ °F.

Water lowered to ______ ft. ______ in. in ______ hrs. ______ min.

Length of test ______ hrs. ______ min. Screen ______

Slot 40+50 Diam. 16" Length 30' Bottom set at ______ ft.

[Show location in Section Plat]

Township name ______ Elev. 404 TOPO Sec. 23

Description of location SE, SE Sec 23, T 2N, R 10W Twp. 2N

500' N 90°10' 7000' N 38°35' ...... Rge. 10W

Location by Groundwater Div.

Signed ______ County St. Clair

ST. CLAIR

Copy for Illinois State Geological Survey No Envelope Index? 23-2N-10W

John C. Moore Corpora... ...ester, N. Y. Binder and holes in leaves, each Patented 1906. 30s136

(675—5M—7-23)

TOWNSHIP MAP No. 4W

...ANY Union Electric Light and Power 10W

300 ft. S. of North property Line

...ORITY 50 ft. E. of Eastern Inner 2 Proj.

...ATION Harbor Line HOLE No. 6 N 23

...ECTOR DATE DRILLED

COUNTY NO. 2383

STRATA	THICKNESS FEET	THICKNESS IN.	DEPTH FEET	DEPTH IN.
Water	16		16	
Sand, fine	12		28	
Sand, coarse	10		38	
Sand, very coarse 1/2 in. gravel	10		48	
Sand, coarse	27		75	
Sand, coarse 5% 1/2 in. gravel	4		79	
Sand, coarse 25% 1/2 in. gravel	4		89	
Sand, coarse 40% 3 in. gravel	3		92	
Sand with gravel	12	8	104	8

Minus 76.06 rock

St. Clair

...nty Index No.

...RILL RECORD Projected 23-2N-10W

John C. Moore Corporation, Rochester, N. Y. Binder and holes in leaves, each Patented 1906.

(675—6M—7-23)

TOWN Cahokia TOWNSHIP MAP No. 4W

COMPANY Union Electric Light & Power 10W

FARM 100 ft. S. of N. property Line on

AUTHORITY Eastern Inner Harbor Line. 2 Proj.

ELEVATION HOLE No. 7 N 23

COLLECTOR DATE DRILLED

COUNTY NO. 2383

STRATA	THICKNESS FEET	THICKNESS IN.	DEPTH FEET	DEPTH IN.
Water	35		35	
Sand, fine	5		40	
Sand, coarse 5% 2 in. gravel	10		50	
Sand, coarse 15% 1/8 in. gravel	15		65	
Sand, coarse 20% 1 1/2 and 10% 1/8 in. gravel	12		77	

St. Clair

County Index No.

DRILL RECORD Projected 23-2N-10W

T.1,R.0 1F-36 ... 321

LOG OF WATER WELL

...ng American Zinc Co.
...erty owner Monsanto, Ill. Well No. 8
...led by H. L. Watson Year Feb. 1946

Formations passed through	Thickness	Depth of Bottom
Gumbo	20	20'
Quick sand	30	50'
Sand	16	66'
Med. Sand	10	76
No log	26	102
TD=102		

[Continue on back if necessary]

...ished in ... at ... to ... ft.
...sed with ... inch ... from 0 to ... ft.
... and ... inch ... from ... to ... ft.
...ze hole below casing ... inch. Static level from surf. ... ft.
...sted capacity ... gal. per min. Temperature ... °F.
...ater lowered to ... ft. ... in. in ... hrs. ... min.
...ength of test ... hrs. ... min. Screen Cook
...lot ... Diam. 16 Length 30' Bottom set at ... ft.
[Show location in Section Plat]
...wnship name ... Elev. ... Sec. 23
...escription of location SE, SE Sec. 23 Twp. 2N
T2N, R10W ... Rge. 10W
Location by Ground water Div.
...igned ... County St. Clair
...CLAIR 23-2N-10W
...opy for Illinois State Geological Survey No ENVELOPE Index:

COUNTY No. 1927

LOG OF WATER WELL

American Zinc Co.
Property owner Monsanto, Ill. Well No. 9
Drilled by H. L. Watson (G. W. Fink) Year Nov. 1950

Formations passed through	Thickness	Depth of Bottom
Mud	35	35
Sand	45	80
Medium sand	20	100
Sand & coarse gravel	4	104
TD=104'		

[Continue on back if necessary]

Finished in ... at ... to ... ft.
Cased with ... inch ... from 0 to ... ft.
and ... inch ... from ... to ... ft.
Size hole below casing ... inch. Static level from surf. ... ft.
Tested capacity ... gal. per min. Temperature ... °F.
Water lowered to ... ft. ... in. in ... hrs. ... min.
Length of test ... hrs. ... min. Screen ...
Slot ... Diam. 40" Length 60' Bottom set at ... ft.
[Show location in Section Plat]
Township name ... Elev. ... Sec. 23
Description of location SW, SE Sec. 23 Twp. 2N
T2N, R10W ... Rge. 10W
Location by Ground water Div.
Signed ... County St. Clair
CLAIR 23-2N-10W
Copy for Illinois State Geological Survey No ENVELOPE Index:

COUNTY No. 1928

APPENDIX F

IEPA BORING LOGS

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY MEMORANDUM

DATE: December 14, 1992

TO: Division File

FROM: Sherry Otto SMO

SUBJECT: Soil sampling at:
LPC #1630000000 -- St. Clair County
Yvonne Sauget Trust Site K

Three borings were drilled on December 8 and 9 at a playground located in Sauget. All work was performed in accordance with the Unit's Standard Operating Procedures. A detailed description of the materials encountered and the OVA readings are on the attached Field Boring Logs. The attached map shows the location of these borings. Samples for chemical analyses were collected by Sheila Murphy, Ken Corkill, Greg Spencer and Kim Nika.

SMO:jsm

cc: **Sheila Murphy**
Unit File
Collinsville Regional File

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY

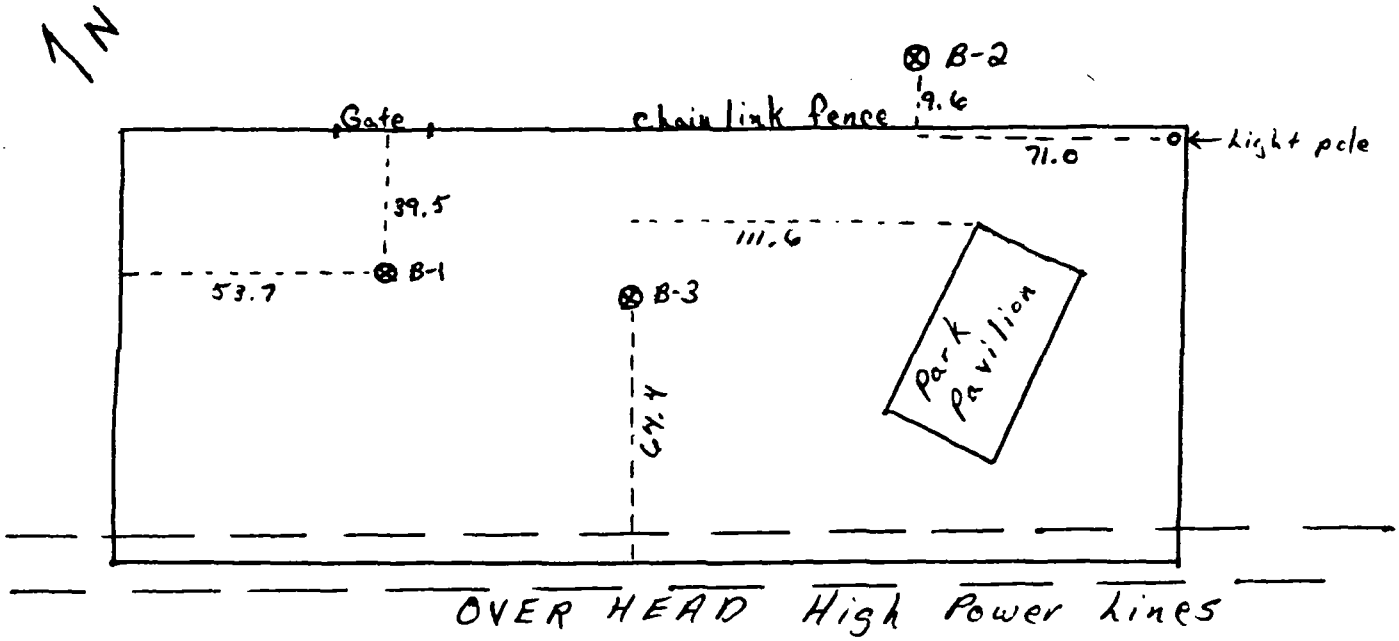
IL 532-0357
ADM 39
054-002

Subject _____

Data _____

Reviewed by _____ Date _____

LPC #1630000000 St. Clair County
Yvonne Sauget Trust Site K



Site not drawn to scale

⊗ B-1 Bore hole locations

--9.6-- Distance from bore hole to site structures

Illinois Environmental Protection Agency — Field Boring Log — Page 1 of 2

Site File No 1630000000 County St. Clair — Boring No 1 — Monitor Well No NA

Site File Name Yvonne Sauget Trust / Site K — Surface Elev ____ — Completion Depth 20

Fed ID No ILD 982073611 — Auger Depth 20 — Rotary Depth NA

Quadrangle ____ Sec. ____ T ____ R ____ — Date Start 12-8-92 Finish 12-8-92

Boring Location 39.5' SW of the NE site chain link fence and 53.7' SE of the NW site chain link fence

Drilling Equipment CME 75 3¼ HSA

Personnel: G - S.O'to; D - P. Mason; H - B. Mathis Jr.; H - B. Walkenbach

Elev.	DESCRIPTION	Depth in feet	Sample No	Sample Type	Sample Recovery	Penetrometer	N Values (Blows)	OVA (in PPM) readings	REMARKS
	Interval 0-5 ft. Silt, yellowish brown 10YR 5/4, moist	1–5		CS	1.8				OVA shoe 2 Head 1
	Interval 5-10 ft. Poor recovery .3mm x .3mm piece of limestone rock in shoe	5–10		CS	0				OVA shoe 0 Head 20
	Fill Mat. Interval 10-12.5 ft. Silt, black 10YR 2/1 with Sand 15% med. grain, gravel 10% 2-5 mm in size, piece of slag 20 x 20 mm. wet	10–12.5		CS	.25				OVA Shoe 100 Head >100
	Interval 12.5-15 Fill Mat. Black Top .25 Sand very coarse grain. Bottom .65 Sand med.-coarse grain wet.	12.5–15		CS	.9				OVA Shoe 800 Head 10

Illinois Environmental Protection Agency — Field Boring Log — Page 2 of 2

Site File No 1630000000 County St. Clair Boring No 1 Monitor Well No

Site File Name Yvonne Sauget Trust / Site K Surface Elev Completion Depth

Fed ID No Auger Depth Rotary Depth

Quadrangle Sec. T R Date Start Finish

Boring Location

Drilling Equipment

Personnel: G. D. H. H.

Elev.	DESCRIPTION	Depth in feet	Sample No	Sample Type	Sample Recovery	Penetrometer	N Values (Blows)	OVA (w HNU readings)	REMARKS
	Interval 15-17.5 Sand Dark gray 10YR 4/1 med. grain, wet.	15							OVA Head 200 Shoe 400
		16		CS	1.8				
		17							
	Interval 17.5-20 Hit hard Fill Mat. locked up augers and broke off sampler, no sample retrieved.	18							
		19		CS	0				
	Boring Completed at 20	20							

Illinois Environmental Protection Agency — Field Boring Log — Page 1 of 1

Site File No 1630000000 County St. Clair Boring No 2 Monitor Well No NA

Site File Name Yvonne Sauget Trust / Site K Surface Elev ____ Completion Depth 15

Fed ID No ILD 982073611 Auger Depth 15 Rotary Depth NA

Quadrangle ____ Sec. ____ T ____ R ____ Date Start 12-8-92 Finish 12-8-92

Boring Location 9.6' NE of NE chain link fence and 71' NW of light pole on SE corner of site

Drilling Equipment CME 75 3¼ HSA

Personnel: G - S. Otto; D - P. Mason; H - B. Mathis Jr.; H - B. Walkenbach

Elev.	DESCRIPTION	Depth in feet	Sample No	Sample Type	Sample Recovery	Penetrometer	N Values (Blows)	OVA (in PPM) readings	REMARKS
	Interval 0-2.5 ft. Silt Dark brown 10YR 4/3 with gravel 20%, 5-10 mm in size	1	CS	1.5					OVA while drilling 40 OVA Head 0 Shoe 11
		2							
	Interval 2.5-5 ft. Silt very dark brown 10YR 2/2, sand 30% very coarse grain, gravel 20% 5-10mm in size.	3	CS	2.5					Shoe 3 Head 0
		4							
	No Recovery	5	CS	0					
		6							
		7							
	No Recovery Fill Mat. Rock and wood in sample Shoe	8	CS	0					Shoe 0 Head 7
		9							
	Interval 10-12.5 Clay, dark gray 10YR 4/1.	10	CS	1.0					Shoe 200 Head >1000
		11							
		12							
	No Recovery	13	CS	0					OVA while drilling 0
		14							
	Boring Completed at 15 ft	15							

Illinois Environmental Protection Agency — Field Boring Log — Page 1 of 2

Site File No 1630000000 County St. Clair — Boring No 3 — Monitor Well No NA

Site File Name Yvonne Sauget Trust / Site K — Surface Elev ____ — Completion Depth 20

Fed ID No ILD 982073611 — Auger Depth 20 — Rotary Depth NA

Quadrangle ____ Sec. ____ T ____ R ____ — Date Start 12-9-92 Finish 12-9-92

Boring Location 64.4 ft. East of SW fence 111.6 ft NW of the most eastern side of park pavilion

Drilling Equipment CME 75 3¼ HSA

Personnel: G - S. Otto
D - P. Mason
H - B. Mathis Jr.
H - B. Walkenbach

Elev.	DESCRIPTION	Depth in feet	Sample No	Sample Type	Sample Recovery	Penetrometer	N Values (Blows)	OVA in HNU readings	REMARKS
	Interval 0-2.5 ft. Dark yellowish brown Sand 10YR 4/6, very fine grain, top 0.15 roots and grass	1		CS	?				OVA Shee 0 Head 0
		2							
	Interval 2.5-5 Top 1 ft. Dark yellowish brown Sand 10YR 4/6, very fine grain. Bottom 1.7 ft. Sand and Gravel Fill 30% gravel consisting of white rock	3		CS	2.1				OVA Shee >1000 Head 0 * * Possible Flameout
		4							
		5							
	Interval 5-7.5 Black Sand and Gravel Fill	6		CS	1.6				OVA Shee 0 * Head 0 * Note: Flame Out
		7							
	Interval 7.5-10 Black Sand, Gravel and asphalt Fill	8		CS	2				OVA Shee 0 * Head 20 * Note: Flame Out
		9							
		10							
	Interval 10-12.5 Black Sand, Gravel, asphalt and wood, wet.	11		CS	.9				OVA Shee 6 Head 200
		12							
	Interval 12.5-15. Black Sand, Gravel, asphalt, and wood Fill very wet	13							OVA Shee 7 Head >1000
		14	x 106	CS	.1				
		15							

Illinois Environmental Protection Agency — Field Boring Log — Page 2 of 2

Site File No 1630000000 County St. Clair Boring No 3 Monitor Well No

Site File Name Yvonne Sauget Trust / Site K Surface Elev Completion Depth

Fed ID No Auger Depth Rotary Depth

Quadrangle Sec. T R Date Start Finish

Boring Location

Drilling Equipment

Personnel: G - D - H - H -

Elev.	DESCRIPTION	Depth in feet	SAMPLES: Sample No	Sample Type	Sample Recovery	Penetrometer	N Values (Blows)	OVA (or HNU) readings	REMARKS
	Interval 15-17.5 Black Fill Mat. Same as above	16	C3		2'				OVA Shoe >1000 Head >1000
		17							
	Interval 17.5-20 Sand, very dark gray, 10YR 3/1, med. to coarse grain, 5% Gravel 2-5mm in size, Natural insitu Sand.	18	C3		3'				While drilling 200 Shoe 0 Head 20
		19							
	Boring Complete at 20	20							

APPENDIX G

CENTRACTS POPULATION CALCULATIONS

FROST ASSOCIATES

P.O. Box 495, Essex, Connecticut 06426
(203) 767-1254 Fax (203) 767-7069

Tom Crause
Manager Site Assessment Program
Illinois EPA
2200 Churchill Road
Springfield, Illinois 62794

Dear Mr. Crause,

Thank you for the opportunities to demonstrate CENTRACTS.

Enclosed are two reports of the Sauget site prepared using the Census Bureau's 1990 Block Group data and boundaries. The one labeled 1 reflects the Illinois data. The second, labeled 2, shows the 4, 3 and 2 mile rings that overlapped into St Louis.

Please note that the Census Bureau's water sources data is not yet available for the mid-western states. The Census Bureau recalled the STF-3A files, containing the water data, in August and has just recently begun to re-issue the files on a state by state basis. Illinois' STF-3A files on CD ROM are expected soon.

This data is available, however, through the Illinois state data center. If they will download these four fields onto a floppy disk, we will incorporate this data into any future reports. Any CENTRACTS reports prepared for your department before the STF-3A water source data is received will be re-run at no charge.

Below is a description of the source data and the methodology used to prepare each report. This description is also included with each report. Also enclosed is a copy of a letter from Sharon Hayes at EPA, Superfund Support Section, Region 1, allowing the states in Region 1 to use CENTRACTS under the MSCA.

The CENTRACTS report below identifies the population, households, and private water wells of each Block Group that lies within, or partially within, the 4, 3, 2, 1, .5, and .25, mile "rings" of the latitude and longitude coordinates above. CENTRACTS may have up to ten radii of any length. 1000 block groups, and 15000 block group sides.

CENTRACTS uses the 1990 Block Group population and Block Group house count data found in the Census Bureau's 1990 STF-1A files. The sources of water supply data are from the Bureau's 1990 STF-3A files. The boundary line coordinates of the Block Groups were extracted from the Census Bureau's 1990 TIGER/Line Files.

CENTRACTS reports are created with programs written by Frost Associates, P.O. Box 495, Essex, Conn. The code was written using Microsoft's Quick-Basic Ver. 4.5.

Latitude and Longitude coordinates identifying a site are entered in degrees and decimal degrees. One or more county files holding Block Group boundary lines are selected for use by CENTRACTS by determining whether the site coordinates fall within the minimum and maximum Lat\Lon coordinates of each county in the state.

Each Block Group line segment has Lat\Lon coordinates representing the "From" and "To" ends of that line. All coordinates from the selected county files are read and converted from degrees, decimal degrees to X\Y miles from the site location. Each line segment is then examined whether it lies within or partially within the maximum ring from the site.

The unique Block Group ID numbers of each line segment that lie within the maximum ring are retained. All Block Group boundary lines matching the Block Group numbers are then extracted from the respective county files to obtain all sides of the included Block Groups. Boundary records are then sorted in adjacent side order to determine the shape and area of each Block Group polygon.

A method to solve for the area of a polygon is to take one-half the sum of the products obtained by multiplying each X-coordinate by the difference between the adjacent Y-coordinates. For a polygon with coordinates at adjacent angles A, B, C, D, and E. The formula can be expressed:

$$\text{Area} = 1/2\{Xa(Ye-Yb)+ Xb(Ya-Yb)+ Xc(Yb-Yd)+ Xd(Yc-Ye)+ Xe(Yd-Ya)\}$$

For each ring, the selected Block Groups will be inside, outside, or intersected by the ring. When a polygon is intersected, the partial Block Group area within that ring is calculated using the method described below.

When a ring intersects a Block Group, the intersect points are solved and plotted at the points where the ring enters and exits the shape. The chord line, a line within the circle connecting the intersect points is determined. This chord line is used to calculate the segment area, the half moon shape between the chord line and the ring, and the sub-polygon created by the chord line and the Block Group boundaries that lie outside the ring.

The segment area is subtracted from the sub-polygon area to determine the area of the sub-polygon outside the ring. The area outside the ring is then subtracted from the area of the entire polygon to arrive at the inside area. This inside area is then divided by the tract's total area to determine the percentage of area within the ring. This process is repeated for each block group that is intersected by one of the rings. The total area, partial area, and percentage of partial area of those block groups within, or partially within a ring, are held in memory for the report.

On occasion, the algorithm described above is unable to determine the area of the partial area. Within the report program is a "Paint" routine which allows an enclosed shape to be highlighted. Another routine calculates the percentage of highlighted screen pixels to the pixels within the polygon. A manual entry is allowed. Both the "paint" method and manual entry method over ride the calculated method.

CENTRACTS lists, starting on page 3, all Block Groups in State, County, Census Tract, and Block Group ID order that lie within, or partially within, the maximum ring. Each Block Group is identified by a City or Town name and by the Block Group's State, County, Tract and Block Group ID number. Following is the Block Group's 1990 population and house count extracted from the Census Bureau's 1990 STF-1A files.

The next four columns display water source data from the 1990 STF-3A files. The first column is "Units with Public system or private company source of water", followed by "Units with individual well, Drilled, source of water"; "Units with individual well, Dug, source of water" and "Units with Other source of water".

For each ring, CENTRACTS then shows the Block Groups that are within that ring, the Block Group's total area in square miles, the partial area of the Block Group within that ring, and the partial percentage within the ring. The areas of the included Block Group and the partial areas are then totaled.

The last section tallies the demographic data within each ring. The percentage of area for each Block Group is multiplied times the census data for that Block Group and totaled for all Block Group's within the ring. Ring totals are then determined by subtracting the three mile data from the four mile, the two mile from the three mile, one from the two, etc.. Population on private wells is calculated using the formula: ((Drilled + Dug Wells) / Households) * Population

We propose that the Illinois Environmental Protection Agency retain Frost Associates to prepare CENTRACTS reports as part of their site assessment and inspection work for the state of Illinois and their cooperative work with the U.S. Environmental Protection Agency.

The price is $100.00 per report for CENTRACTS at the Tract level and $125.00 per report if CENTRACTS is ordered at the Block Group level. Each Tract may have up to ten Block groups. In rural environments, the Block Group resolution is recommended.

Each report will resemble the enclosed reports. Each page will have the Name and Address as supplied by your department, the CERCLIS number and any other identification supplied and the Date prepared.

We propose that the Illinois Environmental Protection Agency FAX their request to (203) 767-7069. The FAX will be your department's Purchase Order to have Frost Associates prepare these reports.

Thank you again for your interest. If you have any questions, please call at (203) 767-1254.

Sincerely,

Bob Frost

Robert H. Frost

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
J.F. KENNEDY FEDERAL BUILDING, BOSTON, MASSACHUSETTS 02203-2211

October 13, 1992

Mr. Harish Panchal (617) 556-1118 [Boston Office]
Bureau of Waste Site Cleanup
Department of Environmental Protection
One Winter Street, Fifth Floor
Boston, MA 02108

Dear Mr. Panchal:

The Region has been made aware of a reasonably priced product/service available which would speed up the collection of private well and population information and meet CERCLA reporting and HRS requirements. Robert Frost, of Frost Associates, is capable of generating private well and population data by rings given a site's latitude and longitude. The cost for this product is approximately $100/site and would be allowable under the MSCA.

I have enclosed a brief description of the processed used to generate this information as well as the results of a test site located in Wilmington, Massachusetts. If you choose to use this approach for your MSCA reports, please include the description of the process and the results as an appendix to the report for documentation purposes.

Please do not hesitate to contact Nancy Smith or Robert Frost for further information regarding this process.

Sincerely,

Sharon M. Hayes
Superfund Support Section
Waste Management Division

cc: Carl DeLoi, Chief
Nancy Smith
Robert Frost
Regional Offices
- Ida Babroudi MA DEP Northern Region (617) 935-2140
- Mary Ellen McBrine MA DEP Southern Region (508) 946-2862
- Don Hanson MA DEP Central Region (508) 792-7653
- Lisa Jones MA DEP Western Region (413) 784-1100

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
J.F. KENNEDY FEDERAL BUILDING, BOSTON, MASSACHUSETTS 02203-2211

October 13, 1992

Robert Frost
Frost Associates
P.O. Box 495
Essex, CT 06426

Dear Mr. Frost:

The following EPA Contractors have been authorized to utilize the private well and population reports that you can prepare for Site Assessment work, if they so choose. As I understand, the approximate cost per site will be $100.

Gary Glennon
NUS Corporation
187 Ballardvale Street
Suite A-100
Wilmington, MA 01887
(508) 658-7899

Diane Stallings
TRC Environmental Corporation
Boot Mills South
Foot of John Street
Lowell, MA 01852
(508) 970-5600

Jocelyn Boesch
Roy F. Weston
Landmark One
One Van De Graaff Drive
Burlington, MA 01803
(617) 229-2050

Tara Taft
CDM Federal Programs Corporation
98 North Washington Street
Suite 200
Boston, MA 02114
(617) 742-2659

Please do not hesitate to call me at (617) 573-5709 if you have any questions.

Sincerely,

Sharon M. Hayes
EPA ARCS Work Assignment Manager

cc: Carl DeLoi
SAG
Gary Glennon, NUS
Diane Stallings, TRC
Jocelyn Boesch, Weston
Tara Taft, CDM

FROST ASSOCIATES

P.O. Box 495, Essex, Connecticut 06426
(203) 767-1254 Fax (203) 767-7069

Dec 16, 1992

To: Tom Crause
Illinois Environmental Protection Agency
7200 Churchill Road
Springfield, Illinois 62794

Fr: Bob Frost
Frost Associates
P.O. Box 495
Essex, CT 06426

Tel: (203) 767-1254
Fax: (203) 767-7069

Sub: CENTRACTS Demonstration
Sauget IL,
Illinois Portion

CIRCLIS:

Site Longitude: 90.167503
Site Latitude : 38.589439

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No.	City	Block Group ID	Blk Grp People	House Holds	Public Water	Drilled Wells	Dug Wells	Other
1	East St. Louis	17163 5004 2	611	179	00	00	00	00
2	East St. Louis	17163 5004 3	439	148	00	00	00	00
3	East St. Louis	17163 5004 4	872	444	00	00	00	00
4	East St. Louis	17163 5004 5	250	77	00	00	00	00
5	East St. Louis	17163 5004 6	928	507	00	00	00	00
6	East St. Louis	17163 5005 5	794	488	00	00	00	00
7	East St. Louis	17163 5006 1	206	79	00	00	00	00
8	East St. Louis	17163 5006 2	580	219	00	00	00	00
9	East St. Louis	17163 5006 3	438	171	00	00	00	00
10	East St. Louis	17163 5006 4	268	112	00	00	00	00
11	East St. Louis	17163 5006 5	266	98	00	00	00	00
12	East St. Louis	17163 5006 6	200	80	00	00	00	00
13	East St. Louis	17163 5008 1	0	0	00	00	00	00
14	East St. Louis	17163 5008 3	0	0	00	00	00	00
15	East St. Louis	17163 5009 1	679	285	00	00	00	00
16	East St. Louis	17163 5009 2	991	459	00	00	00	00
17	East St. Louis	17163 5009 3	1147	464	00	00	00	00
18	East St. Louis	17163 5009 4	1056	463	00	00	00	00
19	East St. Louis	17163 5009 5	550	248	00	00	00	00
20	East St. Louis	17163 5009 6	996	445	00	00	00	00
21	East St. Louis	17163 5009 7	1322	486	00	00	00	00
22	East St. Louis	17163 5010 1	482	224	00	00	00	00
23	East St. Louis	17163 5010 2	208	97	00	00	00	00
[illegible]	East St. Louis	17163 5010 3	492	183	00	00	00	00
[illegible]	East St. Louis	17163 5010 4	583	308	00	00	00	00
26	East St. Louis	17163 5010 5	796	370	00	00	00	00
27	East St. Louis	17163 5010 6	740	303	00	00	00	00
28	East St. Louis	17163 5010 7	383	159	00	00	00	00
29	East St. Louis	17163 5011 1	664	308	00	00	00	00
30	East St. Louis	17163 5011 2	448	192	00	00	00	00
31	East St. Louis	17163 5011 3	701	225	00	00	00	00
32	East St. Louis	17163 5011 4	686	255	00	00	00	00
33	East St. Louis	17163 5011 5	317	161	00	00	00	00
34	East St. Louis	17163 5012 1	523	162	00	00	00	00
35	East St. Louis	17163 5012 2	738	240	00	00	00	00
36	East St. Louis	17163 5012 3	259	101	00	00	00	00
37	East St. Louis	17163 5012 4	1264	466	00	00	00	00
38	East St. Louis	17163 5012 5	360	126	00	00	00	00
39	East St. Louis	17163 5012 6	1060	370	00	00	00	00
40	East St. Louis	17163 5012 7	715	253	00	00	00	00
41	East St. Louis	17163 5012 8	779	273	00	00	00	00
42	East St. Louis	17163 5013 5	1086	409	00	00	00	00
43	East St. Louis	17163 5013 6	405	138	00	00	00	00
44	East St. Louis	17163 5013 7	648	251	00	00	00	00
45	East St. Louis	17163 5013 8	714	257	00	00	00	00
46	Centreville	17163 5023 1	11	6	00	00	00	00
47	Centreville	17163 5023 2	186	82	00	00	00	00
48	Centreville	17163 5025 1	346	144	00	00	00	00
49	Centreville	17163 5025 2	529	163	00	00	00	00
50	Centreville	17163 5025 3	1496	477	00	00	00	00
51	Centreville	17163 5025 4	554	190	00	00	00	00
[illegible]	Centreville	17163 5027 1	397	159	00	00	00	00

53	Centreville	17163 5027	2	813	314	00	00	00	00
54	Centreville	17163 5027	3	361	114	00	00	00	00
55	Centreville	17163 5027	4	74	35	00	00	00	00
56	Centreville	17163 5028	1	1147	432	00	00	00	00
57	Centreville	17163 5028	2	1003	339	00	00	00	00
58	Centreville	17163 5028	3	286	131	00	00	00	00
59	Centreville	17163 5029	1	846	302	00	00	00	00
60	Centreville	17163 5029	3	484	196	00	00	00	00
61	Centreville	17163 5029	4	163	78	00	00	00	00
62	East St. Louis	17163 5041	2	725	256	00	00	00	00
63	East St. Louis	17163 5041	3	53	27	00	00	00	00
64	East St. Louis	17163 5041	4	7	8	00	00	00	00
65	East St. Louis	17163 5041	5	0	0	00	00	00	00
66	East St. Louis	17163 5041	6	4	1	00	00	00	00
67	East St. Louis	17163 5044	1	50	31	00	00	00	00
68	East St. Louis	17163 5044	2	1050	351	00	00	00	00
69	East St. Louis	17163 5044	3	9	10	00	00	00	00
70	East St. Louis	17163 5044	4	3	5	00	00	00	00
71	East St. Louis	17163 5044	5	0	0	00	00	00	00
72	East St. Louis	17163 5044	6	114	42	00	00	00	00
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	Totals:			38355	15176	0	0	0	0

For Radius of 4 Mi., Circle Area = 50.265482

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
1	East St. Louis	17163 50042	0.083424	0.017326	20.77
2	East St. Louis	17163 50043	0.109497	0.099573	90.94
3	East St. Louis	17163 50044	0.308985	0.289649	93.74
4	East St. Louis	17163 50045	0.309614	0.309614	100.00
5	East St. Louis	17163 50046	0.218200	0.065038	29.81
6	East St. Louis	17163 50055	0.128000	0.021989	17.18
7	East St. Louis	17163 50061	0.052645	0.052645	100.00
8	East St. Louis	17163 50062	0.065500	0.065500	100.00
9	East St. Louis	17163 50063	0.075351	0.075351	100.00
10	East St. Louis	17163 50064	0.070534	0.070534	100.00
11	East St. Louis	17163 50065	0.070325	0.070325	100.00
12	East St. Louis	17163 50066	0.076836	0.076836	100.00
13	East St. Louis	17163 50081	0.000000	0.000000	100.00
14	East St. Louis	17163 50083	0.000487	0.000487	100.00
15	East St. Louis	17163 50091	0.150079	0.150079	100.00
16	East St. Louis	17163 50092	0.133888	0.133888	100.00
17	East St. Louis	17163 50093	0.122807	0.122807	100.00
18	East St. Louis	17163 50094	0.165493	0.165493	100.00
19	East St. Louis	17163 50095	0.227226	0.227226	100.00
20	East St. Louis	17163 50096	0.127674	0.127674	100.00
21	East St. Louis	17163 50097	0.221997	0.221997	100.00
22	East St. Louis	17163 50101	0.113464	0.113464	100.00
23	East St. Louis	17163 50102	0.289556	0.289556	100.00
24	East St. Louis	17163 50103	0.123087	0.123087	100.00
25	East St. Louis	17163 50104	0.150682	0.150682	100.00
26	East St. Louis	17163 50105	0.137898	0.137898	100.00
27	East St. Louis	17163 50106	0.231513	0.231513	100.00
28	East St. Louis	17163 50107	0.986039	0.986039	100.00
29	East St. Louis	17163 50111	0.123358	0.123358	100.00
30	East St. Louis	17163 50112	0.283128	0.283128	100.00
31	East St. Louis	17163 50113	0.124965	0.124965	100.00
32	East St. Louis	17163 50114	0.121074	0.121074	100.00
33	East St. Louis	17163 50115	0.201467	0.201467	100.00
34	East St. Louis	17163 50121	0.141351	0.141351	100.00
35	East St. Louis	17163 50122	0.085991	0.085991	100.00
36	East St. Louis	17163 50123	0.512995	0.512995	100.00
37	East St. Louis	17163 50124	0.210728	0.210728	100.00
38	East St. Louis	17163 50125	0.083292	0.083292	100.00
39	East St. Louis	17163 50126	0.142109	0.142109	100.00
40	East St. Louis	17163 50127	0.156306	0.156306	100.00
41	East St. Louis	17163 50128	0.215884	0.215884	100.00
42	East St. Louis	17163 50135	0.237790	0.072423	30.46
43	East St. Louis	17163 50136	0.425351	0.334668	78.68
44	East St. Louis	17163 50137	0.089695	0.089695	100.00
45	East St. Louis	17163 50138	0.200175	0.200175	100.00
46	Centreville	17163 50231	1.434302	1.434302	100.00
47	East St. Louis	17163 5042016	0.117870	0.117870	100.00
	Centreville	17163 50251	0.423470	0.423470	100.00

49	Centreville	17163 50252	0.255455	0.255455	100.00
50	Centreville	17163 50253	0.946751	0.831506	87.83
51	Centreville	17163 50254	0.176466	0.176466	100.00
52	Centreville	17163 50271	0.129215	0.129215	100.00
53	Centreville	17163 50272	0.115952	0.115952	100.00
54	Centreville	17163 50273	0.369399	0.369399	100.00
55	Centreville	17163 50274	0.142026	0.142026	100.00
56	Centreville	17163 50281	1.064547	0.724460	68.05
57	Centreville	17163 50282	0.430636	0.381149	88.51
58	Centreville	17163 50283	0.190958	0.190958	100.00
59	Centreville	17163 50291	0.197752	0.055985	28.31
60	Centreville	17163 50293	0.216492	0.216492	100.00
61	Centreville	17163 50294	2.327304	1.247017	53.58
62	East St. Louis	17163 50412	0.399015	0.008262	2.07
63	East St. Louis	17163 50413	0.832056	0.397041	47.72
64	East St. Louis	17163 50414	1.871335	1.252189	66.91
65	East St. Louis	17163 50415	1.337484	1.337484	100.00
66	East St. Louis	17163 50416	0.334426	0.334426	100.00
67	East St. Louis	17163 50441	0.150641	0.150641	100.00
68	East St. Louis	17163 50442	0.139271	0.139271	100.00
69	East St. Louis	17163 50443	0.064767	0.064767	100.00
70	East St. Louis	17163 50444	0.104993	0.104993	100.00
71	East St. Louis	17163 50445	0.129233	0.129233	100.00
72	East St. Louis	17163 50446	0.072267	0.072267	100.00
73	Canteen	17163 5024013	0.119796	0.030780	25.69
74	Canteen	17163 5024016	0.080744	0.032480	40.23
75	Canteen	17163 5024017	0.300949	0.073330	24.37
76	Canteen	17163 5024031	2.967739	0.163613	5.51
77	Centreville	17163 5026011	0.568392	0.568392	100.00
78	Centreville	17163 5026012	0.451550	0.451550	100.00
79	Centreville	17163 5026013	0.226820	0.226820	100.00
80	Centreville	17163 5026014	0.380730	0.380730	100.00
81	Centreville	17163 5026015	0.291504	0.291504	100.00
82	Centreville	17163 5026016	0.495249	0.495249	100.00
83	Centreville	17163 5026017	3.427231	3.314454	96.71
84	Centreville	17163 5026021	0.227255	0.227255	100.00
85	Centreville	17163 5026022	0.472728	0.472728	100.00
86	Centreville	17163 5026023	0.358357	0.358357	100.00
87	Centreville	17163 5026024	1.058617	1.058617	100.00
88	Centreville	17163 5026025	0.123175	0.123175	100.00
89	Centreville	17163 5026026	0.320571	0.320571	100.00
90	Centreville	17163 5026031	1.096811	1.096811	100.00
91	Centreville	17163 5026032	0.853137	0.835000	97.87
92	Centreville	17163 5026033	0.288524	0.288524	100.00
93	Centreville	17163 5026034	3.637022	3.637022	100.00
94	Sugar Loaf	17163 5031011	1.029880	0.974485	94.62
95	Sugar Loaf	17163 5031012	5.382745	1.330750	24.72
96	Sugar Loaf	17163 5031015	9.564408	1.252388	13.09
97	Sugar Loaf	17163 5031022	6.264924	1.523712	24.32
98	East St. Louis	17163 5042011	0.135338	0.135338	100.00
99	East St. Louis	17163 5042012	0.108865	0.108865	100.00
100	East St. Louis	17163 5042013	0.106360	0.106360	100.00

101	East St. Louis	17163 5042014	0.185220	0.185220	100.00
102	East St. Louis	17163 5042015	0.130498	0.130498	100.00
103	Centreville	17163 50232	0.929248	0.929248	100.00
	Totals:		63.664928	39.422001	

For Radius of 3 Mi., Circle Area = 28.274334

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
7	East St. Louis	17163 50061	0.052645	0.047742	90.69
8	East St. Louis	17163 50062	0.065500	0.065500	100.00
9	East St. Louis	17163 50063	0.075351	0.075351	100.00
10	East St. Louis	17163 50064	0.070534	0.070534	100.00
11	East St. Louis	17163 50065	0.070325	0.069964	99.49
12	East St. Louis	17163 50066	0.076836	0.041869	54.49
13	East St. Louis	17163 50081	0.000000	0.000000	100.00
14	East St. Louis	17163 50083	0.000487	0.000487	100.00
15	East St. Louis	17163 50091	0.150079	0.150079	100.00
16	East St. Louis	17163 50092	0.133888	0.133888	100.00
17	East St. Louis	17163 50093	0.122807	0.122807	100.00
18	East St. Louis	17163 50094	0.165493	0.165493	100.00
19	East St. Louis	17163 50095	0.227226	0.227226	100.00
	East St. Louis	17163 50096	0.127674	0.127674	100.00
21	East St. Louis	17163 50097	0.221997	0.221997	100.00
22	East St. Louis	17163 50101	0.113464	0.113464	100.00
23	East St. Louis	17163 50102	0.289556	0.289556	100.00
24	East St. Louis	17163 50103	0.123087	0.123087	100.00
25	East St. Louis	17163 50104	0.150682	0.150682	100.00
26	East St. Louis	17163 50105	0.137898	0.137898	100.00
27	East St. Louis	17163 50106	0.231513	0.231513	100.00
28	East St. Louis	17163 50107	0.986039	0.986039	100.00
29	East St. Louis	17163 50111	0.123358	0.123358	100.00
30	East St. Louis	17163 50112	0.283128	0.283128	100.00
31	East St. Louis	17163 50113	0.124965	0.124965	100.00
32	East St. Louis	17163 50114	0.121074	0.121074	100.00
33	East St. Louis	17163 50115	0.201467	0.201467	100.00
36	East St. Louis	17163 50123	0.512995	0.408486	79.63
37	East St. Louis	17163 50124	0.210728	0.101013	47.94
38	East St. Louis	17163 50125	0.083292	0.048372	58.08
39	East St. Louis	17163 50126	0.142109	0.142109	100.00
40	East St. Louis	17163 50127	0.156306	0.156306	100.00
41	East St. Louis	17163 50128	0.215884	0.095131	44.07
46	Centreville	17163 50231	1.434302	1.434302	100.00
48	Centreville	17163 50251	0.423470	0.423470	100.00
49	Centreville	17163 50252	0.255455	0.252362	98.79
50	Centreville	17163 50253	0.946751	0.167614	17.70
51	Centreville	17163 50254	0.176466	0.176466	100.00
52	Centreville	17163 50271	0.129215	0.129215	100.00
53	Centreville	17163 50272	0.115952	0.115952	100.00
54	Centreville	17163 50273	0.369399	0.369399	100.00
	Centreville	17163 50274	0.142026	0.142026	100.00

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
56	Centreville	17163 50281	1.064547	0.124453	11.69
58	Centreville	17163 50283	0.190958	0.108314	56.72
60	Centreville	17163 50293	0.216492	0.040771	18.83
61	Centreville	17163 50294	2.327304	0.023347	1.00
64	East St. Louis	17163 50414	1.871335	0.162889	8.70
65	East St. Louis	17163 50415	1.337484	1.337484	100.00
66	East St. Louis	17163 50416	0.334426	0.108861	32.55
67	East St. Louis	17163 50441	0.150641	0.150641	100.00
68	East St. Louis	17163 50442	0.139271	0.093683	67.27
69	East St. Louis	17163 50443	0.064767	0.058618	90.51
70	East St. Louis	17163 50444	0.104993	0.104993	100.00
71	East St. Louis	17163 50445	0.129233	0.129233	100.00
72	East St. Louis	17163 50446	0.072267	0.072267	100.00
77	Centreville	17163 5026011	0.568392	0.568392	100.00
78	Centreville	17163 5026012	0.451550	0.451550	100.00
79	Centreville	17163 5026013	0.226820	0.226820	100.00
80	Centreville	17163 5026014	0.380730	0.362023	95.09
81	Centreville	17163 5026015	0.291504	0.225847	77.48
82	Centreville	17163 5026016	0.495249	0.449742	90.81
83	Centreville	17163 5026017	3.427231	2.588878	75.54
84	Centreville	17163 5026021	0.227255	0.227255	100.00
85	Centreville	17163 5026022	0.472728	0.472728	100.00
86	Centreville	17163 5026023	0.358357	0.358357	100.00
87	Centreville	17163 5026024	1.058617	1.003654	94.81
88	Centreville	17163 5026025	0.123175	0.123175	100.00
89	Centreville	17163 5026026	0.320571	0.320571	100.00
[illegible]	Centreville	17163 5026031	1.096811	0.309780	28.24
[illegible]	Centreville	17163 5026032	0.853137	0.107174	12.56
92	Centreville	17163 5026033	0.288524	0.162242	56.23
93	Centreville	17163 5026034	3.637022	3.637022	100.00
94	Sugar Loaf	17163 5031011	1.029880	0.093532	9.08
96	Sugar Loaf	17163 5031015	9.564408	0.004312	0.05
97	Sugar Loaf	17163 5031022	6.264924	0.006911	0.11
99	East St. Louis	17163 5042012	0.108865	0.000913	0.84
103	Centreville	17163 50232	0.929248	0.929248	100.00
	Totals:		49.940140	23.714750	

For Radius of 2 Mi., Circle Area = 12.566371

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
13	East St. Louis	17163 50081	0.000000	0.000000	100.00
14	East St. Louis	17163 50083	0.000487	0.000487	100.00
19	East St. Louis	17163 50095	0.227226	0.186010	81.86
20	East St. Louis	17163 50096	0.127674	0.077675	60.84
21	East St. Louis	17163 50097	0.221997	0.113650	51.19
22	East St. Louis	17163 50101	0.113464	0.113464	100.00
23	East St. Louis	17163 50102	0.289556	0.289556	100.00
24	East St. Louis	17163 50103	0.123087	0.123087	100.00
25	East St. Louis	17163 50104	0.150682	0.150682	100.00
[illegible]	East St. Louis	17163 50105	0.137898	0.137898	100.00

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
27	East St. Louis	17163 50106	0.231513	0.231513	100.00
28	East St. Louis	17163 50107	0.986039	0.968321	98.20
30	East St. Louis	17163 50112	0.283128	0.036900	13.03
31	East St. Louis	17163 50113	0.124965	0.103870	83.12
32	East St. Louis	17163 50114	0.121074	0.121074	100.00
33	East St. Louis	17163 50115	0.201467	0.194247	96.42
46	Centreville	17163 50231	1.434302	1.431179	99.78
48	Centreville	17163 50251	0.423470	0.013047	3.08
52	Centreville	17163 50271	0.129215	0.014626	11.32
54	Centreville	17163 50273	0.369399	0.052385	14.18
55	Centreville	17163 50274	0.142026	0.044738	31.50
65	East St. Louis	17163 50415	1.337484	0.654774	48.96
70	East St. Louis	17163 50444	0.104993	0.016102	15.34
71	East St. Louis	17163 50445	0.129233	0.003585	2.77
72	East St. Louis	17163 50446	0.072267	0.069854	96.66
77	Centreville	17163 5026011	0.568392	0.568392	100.00
78	Centreville	17163 5026012	0.451550	0.451550	100.00
79	Centreville	17163 5026013	0.226820	0.202136	89.12
80	Centreville	17163 5026014	0.380730	0.009133	2.40
82	Centreville	17163 5026016	0.495249	0.056855	11.48
83	Centreville	17163 5026017	3.427231	1.222606	35.67
84	Centreville	17163 5026021	0.227255	0.227255	100.00
85	Centreville	17163 5026022	0.472728	0.164654	34.83
87	Centreville	17163 5026024	1.058617	0.034093	3.22
88	Centreville	17163 5026025	0.123175	0.016567	13.45
89	Centreville	17163 5026026	0.320571	0.191318	59.68
[illegible]	Centreville	17163 5026034	3.637022	2.525013	69.43
103	Centreville	17163 50232	0.929248	0.929248	100.00
	Totals:		19.801237	11.747541	

For Radius of 1 Mi., Circle Area = 3.141593

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
23	East St. Louis	17163 50102	0.289556	0.073870	25.51
27	East St. Louis	17163 50106	0.231513	0.081223	35.08
28	East St. Louis	17163 50107	0.986039	0.076498	7.76
46	Centreville	17163 50231	1.434302	0.431074	30.05
77	Centreville	17163 5026011	0.568392	0.540808	95.15
78	Centreville	17163 5026012	0.451550	0.034707	7.69
83	Centreville	17163 5026017	3.427231	0.224147	6.54
93	Centreville	17163 5026034	3.637022	0.761181	20.93
103	Centreville	17163 50232	0.929248	0.918085	98.80
	Totals:		11.954854	3.141593	

For Radius of .5 Mi., Circle Area = 0.785398

		Block	Total	Partial	% Within

No.	City	Group ID	Area	Area	Radius
46	Centreville	17163 50231	1.434302	0.011297	0.79
77	Centreville	17163 5026011	0.568392	0.196863	34.64
83	Centreville	17163 5026017	3.427231	0.000529	0.02
103	Centreville	17163 50232	0.929248	0.576709	62.06
	Totals:		6.359174	0.785398	

For Radius of .25 Mi., Circle Area = 0.196350

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
77	Centreville	17163 5026011	0.568392	0.030862	5.43
103	Centreville	17163 50232	0.929248	0.165487	17.81
	Totals:		1.497641	0.196350	

========== Site Data ==========

Population:	33540.01
Households:	13163.88
Drilled Wells:	0.00
Dug Wells:	0.00
Other Wells:	0.00

========== Partial (RING) data ==========

---- Within Ring: 4 Mile(s) and 3 Mile(s) ----

Population:	10511.19
Households:	3917.71
Drilled Wells:	0.00
Dug Wells:	0.00
Other Wells:	0.00

** Population On Private Wells: 0.00

---- Within Ring: 3 Mile(s) and 2 Mile(s) ----

Population:	15548.30
Households:	6081.22
Drilled Wells:	0.00
Dug Wells:	0.00
Other Wells:	0.00

** Population On Private Wells: 0.00

---- Within Ring: 2 Mile(s) and 1 Mile(s) ----

Population:	6951.06
Households:	2938.74
Drilled Wells:	0.00
Dug Wells:	0.00
Other Wells:	0.00

** Population On Private Wells: 0.00

---- Within Ring: 1 Mile(s) and .5 Mile(s) ----

Population:	413.95
Households:	175.27
Drilled Wells:	0.00
Dug Wells:	0.00
Other Wells:	0.00

** Population On Private Wells: 0.00

---- Within Ring: .5 Mile(s) and .25 Mile(s) ----

Population:	82.40
Households:	36.33
Drilled Wells:	0.00
Dug Wells:	0.00
Other Wells:	0.00

** Population On Private Wells: 0.00

---- Within Ring: .25 Mile(s) and 0 Mile(s) ----

Population:	33.12
Households:	14.60
Drilled Wells:	0.00
Dug Wells:	0.00
Other Wells:	0.00

** Population On Private Wells: 0.00

** Total Population On Private Wells: 0.00

FROST ASSOCIATES

P.O. Box 495, Essex, Connecticut 06426
(203) 767-1254 Fax (203) 767-7069

Dec 16, 1992

To: Tom Crause
Illinois Environmental Protection Agency
7200 Churchill Road
Springfield, Illinois 62794

Fr: Bob Frost
Frost Associates
P.O. Box 495
Essex, CT 06426

Tel: (203) 767-1254
Fax: (203) 767-7069

Sub: CENTRACTS Demonstration
Sauget IL,
Missouri Portion

CIRCLIS:

Site Longitude: 90.167503
Site Latitude : 38.589439

The CENTRACTS report below identifies the population, households, and private water wells of each Block Group that lies within, or partially within, the 4, 3, 2, 1, .5, and .25, mile "rings" of the latitude and longitude coordinates above. CENTRACTS may have up to ten radii of any length. 1000 block groups, and 15000 block group sides.

CENTRACTS uses the 1990 Block Group population and Block Group house count data found in the Census Bureau's 1990 STF-1A files. The sources of water supply data are from the Bureau's 1990 STF-3A files. The boundary line coordinates of the Block Groups were extracted from the Census Bureau's 1990 TIGER/Line Files.

CENTRACTS reports are created with programs written by Frost Associates, P.O. Box 495, Essex, Conn. The code was written using Microsoft's Quick-Basic Ver. 4.5.

Latitude and Longitude coordinates identifying a site are entered in degrees and decimal degrees. One or more county files holding Block Group boundary lines are selected for use by CENTRACTS by determining whether the site coordinates fall within the minimum and maximum Lat\Lon coordinates of each county in the state.

Each Block Group line segment has Lat\Lon coordinates representing the "From" and "To" ends of that line. All coordinates from the selected county files are read and converted from degrees, decimal degrees to X\Y miles from the site location. Each line segment is then examined whether it lies within or partially within the maximum ring from the site.

The unique Block Group ID numbers of each line segment that lie within the maximum ring are retained. All Block Group boundary lines matching the Block Group numbers are then extracted from the respective county files to obtain all sides of the in cluded Block Groups. Boundary records are then sorted in adjacent side order to determine the shape and area of each Block Group polygon.

A method to solve for the area of a polygon is to take one-half the sum of the products obtained by multiplying each X-coordinate by the difference between the adjacent Y-coordinates. For a polygon with coordinates at adjacent angles A, B, C, D, and E. The formula can be expressed:

Area = 1/2{Xa(Ye-Yb)+ Xb(Ya-Yb)+ Xc(Yb-Yd)+ Xd(Yc-Ye)+ Xe(Yd-Ya)}

For each ring, the selected Block Groups will be inside, outside, or intersected by the ring. When a polygon is intersected, the partial Block Group area within that ring is calculated using the method described below.

When a ring intersects a Block Group, the intersect points are solved and plotted at the points where the ring enters and exits the shape. The chord line, a line within the circle connecting the intersect points is determined. This chord line is used to calculate the segment area, the half moon shape between the chord line and the ring, and the sub-polygon created by the chord line and the Block Group boundaries that lie outside the ring.

The segment area is subtracted from the sub-polygon area to determine the area of the sub-polygon outside the ring. The area outside the ring is then subtracted from the area of the entire polygon to arrive at the inside area. This inside area is then divided by the tract's total area to determine the percentage of area within the ring. This process is repeated for each block group that is intersected by one of the rings. The total area, partial area, and percentage of partial area of those block groups within, or partially within a ring, are held in memory for the report.

On occasion, the algorithm described above is unable to determine the area of the partial area. Within the report program is a "Paint" routine which allows an enclosed shape to be highlighted. Another routine calculates the percentage of highlighted screen pixels
to the pixels within the polygon. A manual entry is allowed. Both the "paint" method and manual entry method over ride the calculated method.

CENTRACTS lists, starting on page 4, all Block Groups in State, County, Census Tract, and Block Group ID order that lie within, or partially within, the maximum ring. Each Block Group is identified by a City or Town name and by the Block Group's State, County, Tract and Block Group ID number. Following is the Block Group's 1990 population and house count extracted from the Census Bureau's 1990 STF-1A files.

The next four columns display water source data from the 1990 STF-3A files. The first column is "Units with Public system or private company source of water", followed by "Units with individual well, Drilled, source of water"; "Units with individual well, Dug, source of water" and "Units with Other source of water".

For each ring, CENTRACTS then shows the Block Groups that are within that ring, the Block Group's total area in square miles, the partial area of the Block Group within that ring, and the partial percentage within the ring. The areas of the included Block Group and the partial areas are then totaled.

The last section tallies the demographic data within each ring. The percentage of area for each Block Group is multiplied times the census data for that Block Group and totaled for all Block Group's within the ring. Ring totals are then determined by subtracting the three mile data from the four mile, the two mile from the three mile, one from the two, etc... Population on private wells is calculated using the formula: ((Drilled + Dug Wells) / Households) * Population

No.	City	Block Group ID	Blk Grp People	House Holds	Public Water	Drilled Wells	Dug Wells	Other
1	St. Louis	29510 1155 1	881	483	00	00	00	00
2	St. Louis	29510 1156 1	1319	445	00	00	00	00
3	St. Louis	29510 1156 3	675	363	00	00	00	00
4	St. Louis	29510 1156 6	746	355	00	00	00	00
5	St. Louis	29510 1156 7	1599	884	00	00	00	00
6	St. Louis	29510 1156 8	805	439	00	00	00	00
7	St. Louis	29510 1157 1	259	161	00	00	00	00
8	St. Louis	29510 1157 2	586	275	00	00	00	00
9	St. Louis	29510 1157 3	800	391	00	00	00	00
10	St. Louis	29510 1157 4	480	259	00	00	00	00
11	St. Louis	29510 1157 5	1013	482	00	00	00	00
12	St. Louis	29510 1164 1	981	523	00	00	00	00
13	St. Louis	29510 1164 2	761	400	00	00	00	00
14	St. Louis	29510 1164 3	1044	515	00	00	00	00
15	St. Louis	29510 1164 4	606	330	00	00	00	00
16	St. Louis	29510 1164 5	674	438	00	00	00	00
17	St. Louis	29510 1164 6	609	298	00	00	00	00
18	St. Louis	29510 1164 7	425	185	00	00	00	00
19	St. Louis	29510 1165 1	803	394	00	00	00	00
20	St. Louis	29510 1165 2	394	229	00	00	00	00
21	St. Louis	29510 1165 3	575	318	00	00	00	00
22	St. Louis	29510 1165 4	924	418	00	00	00	00
23	St. Louis	29510 1165 5	716	333	00	00	00	00
[illegible]	St. Louis	29510 1165 6	815	366	00	00	00	00
[illegible]	St. Louis	29510 1165 7	780	375	00	00	00	00
26	St. Louis	29510 1173 1	338	153	00	00	00	00
27	St. Louis	29510 1173 2	762	337	00	00	00	00
28	St. Louis	29510 1173 5	500	195	00	00	00	00
29	St. Louis	29510 1174 1	1106	474	00	00	00	00
30	St. Louis	29510 1174 2	840	368	00	00	00	00
31	St. Louis	29510 1174 3	927	467	00	00	00	00
32	St. Louis	29510 1174 4	976	492	00	00	00	00
33	St. Louis	29510 1184 1	618	500	00	00	00	00
34	St. Louis	29510 1184 2	297	299	00	00	00	00
35	St. Louis	29510 1185 1	140	88	00	00	00	00
36	St. Louis	29510 1185 2	216	109	00	00	00	00
37	St. Louis	29510 1211 6	1191	1148	00	00	00	00
38	St. Louis	29510 1213 1	713	521	00	00	00	00
39	St. Louis	29510 1213 2	0	1	00	00	00	00
40	St. Louis	29510 1213 5	169	66	00	00	00	00
41	St. Louis	29510 1214 1	157	3	00	00	00	00
42	St. Louis	29510 1214 2	45	1	00	00	00	00
43	St. Louis	29510 1214 3	47	21	00	00	00	00
44	St. Louis	29510 1221 1	0	0	00	00	00	00
45	St. Louis	29510 1221 2	662	372	00	00	00	00
46	St. Louis	29510 1221 3	638	370	00	00	00	00
47	St. Louis	29510 1221 4	437	155	00	00	00	00
48	St. Louis	29510 1221 5	10	5	00	00	00	00
49	St. Louis	29510 1222 1	1	0	00	00	00	00
50	St. Louis	29510 1222 2	0	0	00	00	00	00
51	St. Louis	29510 1222 3	195	2	00	00	00	00
[illegible]	St. Louis	29510 1224 1	0	0	00	00	00	00

53	St. Louis	29510	1224	2	0	0	00	00	00	00
54	St. Louis	29510	1224	3	132	65	00	00	00	00
55	St. Louis	29510	1224	4	1409	815	00	00	00	00
56	St. Louis	29510	1224	5	384	210	00	00	00	00
57	St. Louis	29510	1224	6	1105	654	00	00	00	00
58	St. Louis	29510	1231	1	290	161	00	00	00	00
59	St. Louis	29510	1231	2	268	152	00	00	00	00
60	St. Louis	29510	1231	3	809	482	00	00	00	00
61	St. Louis	29510	1231	4	1244	535	00	00	00	00
62	St. Louis	29510	1231	5	200	94	00	00	00	00
63	St. Louis	29510	1231	6	259	127	00	00	00	00
64	St. Louis	29510	1231	7	1212	621	00	00	00	00
65	St. Louis	29510	1232	1	593	215	00	00	00	00
66	St. Louis	29510	1232	2	287	204	00	00	00	00
67	St. Louis	29510	1232	3	488	331	00	00	00	00
68	St. Louis	29510	1232	4	428	246	00	00	00	00
69	St. Louis	29510	1232	5	720	371	00	00	00	00
70	St. Louis	29510	1233	1	267	179	00	00	00	00
71	St. Louis	29510	1233	2	467	217	00	00	00	00
72	St. Louis	29510	1233	3	752	461	00	00	00	00
73	St. Louis	29510	1233	4	420	270	00	00	00	00
74	St. Louis	29510	1233	5	246	129	00	00	00	00
75	St. Louis	29510	1233	6	1023	563	00	00	00	00
76	St. Louis	29510	1233	7	179	108	00	00	00	00
77	St. Louis	29510	1234	1	8	9	00	00	00	00
78	St. Louis	29510	1234	2	476	361	00	00	00	00
	St. Louis	29510	1234	3	522	404	00	00	00	00
80	St. Louis	29510	1234	4	542	436	00	00	00	00
81	St. Louis	29510	1234	5	391	300	00	00	00	00
82	St. Louis	29510	1234	6	672	376	00	00	00	00
83	St. Louis	29510	1234	7	299	184	00	00	00	00
84	St. Louis	29510	1234	8	145	110	00	00	00	00
85	St. Louis	29510	1235	1	0	0	00	00	00	00
86	St. Louis	29510	1235	2	0	0	00	00	00	00
87	St. Louis	29510	1235	3	0	0	00	00	00	00
88	St. Louis	29510	1241	1	485	161	00	00	00	00
89	St. Louis	29510	1241	2	502	264	00	00	00	00
90	St. Louis	29510	1241	3	504	275	00	00	00	00
91	St. Louis	29510	1241	4	663	344	00	00	00	00
92	St. Louis	29510	1241	5	652	336	00	00	00	00
93	St. Louis	29510	1241	6	939	468	00	00	00	00
94	St. Louis	29510	1241	7	1170	564	00	00	00	00
95	St. Louis	29510	1241	8	1027	526	00	00	00	00
96	St. Louis	29510	1242	1	431	215	00	00	00	00
97	St. Louis	29510	1242	2	535	317	00	00	00	00
98	St. Louis	29510	1242	3	611	276	00	00	00	00
99	St. Louis	29510	1242	4	733	355	00	00	00	00
100	St. Louis	29510	1242	5	688	354	00	00	00	00
101	St. Louis	29510	1242	6	1005	493	00	00	00	00
102	St. Louis	29510	1242	7	402	227	00	00	00	00
103	St. Louis	29510	1243	1	771	411	00	00	00	00
104	St. Louis	29510	1243	2	353	212	00	00	00	00
105	St. Louis	29510	1243	3	719	368	00	00	00	00
106	St. Louis	29510	1243	4	673	347	00	00	00	00
1	St. Louis	29510	1243	5	190	114	00	00	00	00

108	St. Louis	29510	1243	6	734	438	00	00	00	00
109	St. Louis	29510	1243	7	529	333	00	00	00	00
110	St. Louis	29510	1243	8	405	225	00	00	00	00
111	St. Louis	29510	1246	1	36	38	00	00	00	00
112	St. Louis	29510	1246	2	746	355	00	00	00	00
113	St. Louis	29510	1246	3	1254	684	00	00	00	00
114	St. Louis	29510	1246	4	171	106	00	00	00	00
115	St. Louis	29510	1255	1	70	60	00	00	00	00
116	St. Louis	29510	1255	2	1805	1875	00	00	00	00
117	St. Louis	29510	1255	3	224	0	00	00	00	00
118	St. Louis	29510	1256	1	97	111	00	00	00	00
119	St. Louis	29510	1256	2	46	43	00	00	00	00
120	St. Louis	29510	1256	3	366	269	00	00	00	00
121	St. Louis	29510	1256	4	0	0	00	00	00	00
122	St. Louis	29510	1256	5	5	6	00	00	00	00
123	St. Louis	29510	1256	6	637	810	00	00	00	00
124	St. Louis	29510	1257	1	0	0	00	00	00	00
125	St. Louis	29510	1257	2	1555	994	00	00	00	00
126	St. Louis	29510	1257	3	176	117	00	00	00	00
127	St. Louis	29510	1257	4	746	555	00	00	00	00
128	St. Louis	29510	1257	5	1435	774	00	00	00	00
129	St. Louis	29510	1257	6	7	9	00	00	00	00
130	St. Louis	29510	1257	7	316	124	00	00	00	00
131	St. Louis	29510	1266	1	0	0	00	00	00	00
132	St. Louis	29510	1266	2	56	31	00	00	00	00
133	St. Louis	29510	1266	9	554	259	00	00	00	00
	Totals:				71515	40039	0	0	0	0

For Radius of 4 Mi., Circle Area = 50.265482

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
1	St. Louis	29510 11551	0.073543	0.007978	10.85
2	St. Louis	29510 11561	0.616762	0.434446	70.44
3	St. Louis	29510 11563	0.070161	0.017766	25.32
4	St. Louis	29510 11566	0.065840	0.003449	5.24
5	St. Louis	29510 11567	0.133312	0.128384	96.30
6	St. Louis	29510 11568	0.063842	0.046435	72.73
7	St. Louis	29510 11571	0.119442	0.119442	100.00
8	St. Louis	29510 11572	0.048145	0.048145	100.00
9	St. Louis	29510 11573	0.049077	0.049077	100.00
10	St. Louis	29510 11574	0.063233	0.059221	93.65
11	St. Louis	29510 11575	0.062996	0.000857	1.36
12	St. Louis	29510 11641	0.069158	0.069158	100.00
13	St. Louis	29510 11642	0.061288	0.061288	100.00
14	St. Louis	29510 11643	0.061010	0.061010	100.00
15	St. Louis	29510 11644	0.053603	0.013255	24.73
16	St. Louis	29510 11645	0.055078	0.024945	45.29
17	St. Louis	29510 11646	0.041746	0.032837	78.66
18	St. Louis	29510 11647	0.043227	0.017116	39.60
19	St. Louis	29510 11651	0.047747	0.047747	100.00
20	St. Louis	29510 11652	0.067342	0.067342	100.00
21	St. Louis	29510 11653	0.037287	0.037287	100.00
22	St. Louis	29510 11654	0.044525	0.026154	58.74
23	St. Louis	29510 11655	0.039035	0.039035	100.00
24	St. Louis	29510 11656	0.063492	0.030768	48.46
25	St. Louis	29510 11657	0.046267	0.026112	56.44
26	St. Louis	29510 11731	0.065834	0.064283	97.64
27	St. Louis	29510 11732	0.150218	0.083352	55.49
28	St. Louis	29510 11735	0.099760	0.005616	5.63
29	St. Louis	29510 11741	0.152124	0.099730	65.56
30	St. Louis	29510 11742	0.039019	0.039019	100.00
31	St. Louis	29510 11743	0.054709	0.054709	100.00
32	St. Louis	29510 11744	0.063201	0.022175	35.09
33	St. Louis	29510 11841	0.190839	0.047580	24.93
34	St. Louis	29510 11842	0.360061	0.105196	29.22
35	St. Louis	29510 11851	0.054109	0.052685	97.37
36	St. Louis	29510 11852	0.063753	0.011757	18.44
37	St. Louis	29510 12116	0.097156	0.006342	6.53
38	St. Louis	29510 12131	0.085955	0.042842	49.84
39	St. Louis	29510 12132	0.036092	0.012665	35.09
40	St. Louis	29510 12135	0.163617	0.000284	0.17
41	St. Louis	29510 12141	0.072728	0.072728	100.00
42	St. Louis	29510 12142	0.154609	0.120735	78.09
43	St. Louis	29510 12143	0.107356	0.041143	38.32
44	St. Louis	29510 12211	0.047358	0.047358	100.00
45	St. Louis	29510 12212	0.098297	0.098297	100.00
46	St. Louis	29510 12213	0.042894	0.042894	100.00
47	St. Louis	29510 12214	0.039527	0.039527	100.00
	St. Louis	29510 12215	0.052334	0.052334	100.00

49	St. Louis	29510	12221	0.212940	0.212940	100.00
50	St. Louis	29510	12222	0.155400	0.155400	100.00
51	St. Louis	29510	12223	0.320977	0.320977	100.00
52	St. Louis	29510	12241	0.112256	0.112256	100.00
53	St. Louis	29510	12242	0.039955	0.039955	100.00
54	St. Louis	29510	12243	0.046662	0.046662	100.00
55	St. Louis	29510	12244	0.082132	0.082132	100.00
56	St. Louis	29510	12245	0.065934	0.065934	100.00
57	St. Louis	29510	12246	0.050024	0.050024	100.00
58	St. Louis	29510	12311	0.046294	0.046294	100.00
59	St. Louis	29510	12312	0.045531	0.045531	100.00
60	St. Louis	29510	12313	0.096761	0.096761	100.00
61	St. Louis	29510	12314	0.059580	0.059580	100.00
62	St. Louis	29510	12315	0.038220	0.038220	100.00
63	St. Louis	29510	12316	0.032872	0.032872	100.00
64	St. Louis	29510	12317	0.070402	0.070402	100.00
65	St. Louis	29510	12321	0.065173	0.065173	100.00
66	St. Louis	29510	12322	0.074645	0.074645	100.00
67	St. Louis	29510	12323	0.094679	0.094679	100.00
68	St. Louis	29510	12324	0.127661	0.127661	100.00
69	St. Louis	29510	12325	0.068138	0.068138	100.00
70	St. Louis	29510	12331	0.040223	0.040223	100.00
71	St. Louis	29510	12332	0.032676	0.032676	100.00
72	St. Louis	29510	12333	0.053024	0.053024	100.00
73	St. Louis	29510	12334	0.048995	0.048995	100.00
74	St. Louis	29510	12335	0.030880	0.030880	100.00
	St. Louis	29510	12336	0.098714	0.098714	100.00
76	St. Louis	29510	12337	0.045053	0.045053	100.00
77	St. Louis	29510	12341	0.051461	0.051461	100.00
78	St. Louis	29510	12342	0.074312	0.074312	100.00
79	St. Louis	29510	12343	0.082409	0.082409	100.00
80	St. Louis	29510	12344	0.061812	0.061812	100.00
81	St. Louis	29510	12345	0.043645	0.043645	100.00
82	St. Louis	29510	12346	0.043571	0.043571	100.00
83	St. Louis	29510	12347	0.044544	0.044544	100.00
84	St. Louis	29510	12348	0.042694	0.042694	100.00
85	St. Louis	29510	12351	0.591519	0.591519	100.00
86	St. Louis	29510	12352	0.104872	0.104872	100.00
87	St. Louis	29510	12353	0.259748	0.259748	100.00
88	St. Louis	29510	12411	0.047817	0.047817	100.00
89	St. Louis	29510	12412	0.045918	0.045918	100.00
90	St. Louis	29510	12413	0.045990	0.045990	100.00
91	St. Louis	29510	12414	0.047210	0.047210	100.00
92	St. Louis	29510	12415	0.047591	0.047591	100.00
93	St. Louis	29510	12416	0.047829	0.047829	100.00
94	St. Louis	29510	12417	0.065113	0.065113	100.00
95	St. Louis	29510	12418	0.063317	0.063317	100.00
96	St. Louis	29510	12421	0.032806	0.032806	100.00
97	St. Louis	29510	12422	0.035150	0.035150	100.00
98	St. Louis	29510	12423	0.040904	0.040904	100.00
99	St. Louis	29510	12424	0.046341	0.046341	100.00
100	St. Louis	29510	12425	0.041801	0.041801	100.00
101	St. Louis	29510	12426	0.052511	0.052511	100.00
102	St. Louis	29510	12427	0.049618	0.049618	100.00
	St. Louis	29510	12431	0.066819	0.066819	100.00

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
104	St. Louis	29510 12432	0.037126	0.037126	100.00
105	St. Louis	29510 12433	0.099732	0.099732	100.00
106	St. Louis	29510 12434	0.033310	0.033310	100.00
107	St. Louis	29510 12435	0.039903	0.039903	100.00
108	St. Louis	29510 12436	0.066634	0.066634	100.00
109	St. Louis	29510 12437	0.046943	0.046943	100.00
110	St. Louis	29510 12438	0.053222	0.053222	100.00
111	St. Louis	29510 12461	0.674471	0.674471	100.00
112	St. Louis	29510 12462	0.102784	0.102784	100.00
113	St. Louis	29510 12463	0.105159	0.105159	100.00
114	St. Louis	29510 12464	0.165716	0.165716	100.00
115	St. Louis	29510 12551	0.096211	0.096211	100.00
116	St. Louis	29510 12552	0.119914	0.119914	100.00
117	St. Louis	29510 12553	0.198122	0.198122	100.00
118	St. Louis	29510 12561	0.112987	0.112987	100.00
119	St. Louis	29510 12562	0.105599	0.105599	100.00
120	St. Louis	29510 12563	0.084807	0.084807	100.00
121	St. Louis	29510 12564	0.142823	0.142823	100.00
122	St. Louis	29510 12565	0.156828	0.156828	100.00
123	St. Louis	29510 12566	0.365310	0.365310	100.00
124	St. Louis	29510 12571	0.204682	0.204682	100.00
125	St. Louis	29510 12572	0.074027	0.074027	100.00
126	St. Louis	29510 12573	0.042539	0.042539	100.00
127	St. Louis	29510 12574	0.076325	0.076325	100.00
128	St. Louis	29510 12575	0.072012	0.059425	82.52
129	St. Louis	29510 12576	0.057023	0.057023	100.00
130	St. Louis	29510 12577	0.048132	0.048132	100.00
131	St. Louis	29510 12661	0.603522	0.177154	29.35
132	St. Louis	29510 12662	0.139141	0.119123	85.61
133	St. Louis	29510 12669	0.129329	0.023938	18.51
	Totals:		13.076165	10.755596	

For Radius of 3 Mi., Circle Area = 28.274334

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
7	St. Louis	29510 11571	0.119442	0.005395	4.52
49	St. Louis	29510 12221	0.212940	0.212940	100.00
50	St. Louis	29510 12222	0.155400	0.153174	98.57
51	St. Louis	29510 12223	0.320977	0.020143	6.28
52	St. Louis	29510 12241	0.112256	0.112256	100.00
53	St. Louis	29510 12242	0.039955	0.039955	100.00
54	St. Louis	29510 12243	0.046662	0.046662	100.00
55	St. Louis	29510 12244	0.082132	0.082132	100.00
56	St. Louis	29510 12245	0.065934	0.012903	19.57
57	St. Louis	29510 12246	0.050024	0.049649	99.25
65	St. Louis	29510 12321	0.065173	0.064918	99.61
66	St. Louis	29510 12322	0.074645	0.074645	100.00
67	St. Louis	29510 12323	0.094679	0.070642	74.61
68	St. Louis	29510 12324	0.127661	0.000565	0.44
	St. Louis	29510 12325	0.068138	0.013566	19.91

70	St. Louis	29510 12331	0.040223	0.040223	100.00
71	St. Louis	29510 12332	0.032676	0.032676	100.00
72	St. Louis	29510 12333	0.053024	0.053024	100.00
73	St. Louis	29510 12334	0.048995	0.014650	29.90
74	St. Louis	29510 12335	0.030880	0.008121	26.30
75	St. Louis	29510 12336	0.098714	0.044656	45.24
76	St. Louis	29510 12337	0.045053	0.045053	100.00
77	St. Louis	29510 12341	0.051461	0.051461	100.00
78	St. Louis	29510 12342	0.074312	0.074312	100.00
79	St. Louis	29510 12343	0.082409	0.082409	100.00
80	St. Louis	29510 12344	0.061812	0.061812	100.00
81	St. Louis	29510 12345	0.043645	0.043645	100.00
82	St. Louis	29510 12346	0.043571	0.043571	100.00
83	St. Louis	29510 12347	0.044544	0.044544	100.00
84	St. Louis	29510 12348	0.042694	0.042694	100.00
85	St. Louis	29510 12351	0.591519	0.591519	100.00
86	St. Louis	29510 12352	0.104872	0.104872	100.00
87	St. Louis	29510 12353	0.259748	0.259748	100.00
103	St. Louis	29510 12431	0.066819	0.047491	71.07
104	St. Louis	29510 12432	0.037126	0.031153	83.91
105	St. Louis	29510 12433	0.099732	0.069079	69.26
106	St. Louis	29510 12434	0.033310	0.031424	94.34
107	St. Louis	29510 12435	0.039903	0.039903	100.00
108	St. Louis	29510 12436	0.066634	0.066634	100.00
109	St. Louis	29510 12437	0.046943	0.017082	36.39
110	St. Louis	29510 12438	0.053222	0.008943	16.80
1	St. Louis	29510 12461	0.674471	0.658068	97.57
112	St. Louis	29510 12462	0.102784	0.101825	99.07
113	St. Louis	29510 12463	0.105159	0.033208	31.58
114	St. Louis	29510 12464	0.165716	0.165716	100.00
117	St. Louis	29510 12553	0.198122	0.008383	4.23
118	St. Louis	29510 12561	0.112987	0.004973	4.40
119	St. Louis	29510 12562	0.105599	0.049910	47.26
121	St. Louis	29510 12564	0.142823	0.132218	92.58
122	St. Louis	29510 12565	0.156828	0.057409	36.61
123	St. Louis	29510 12566	0.365310	0.365027	99.92
	Totals:		5.959660	4.486984	

For Radius of 2 Mi., Circle Area = 12.566371

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
49	St. Louis	29510 12221	0.212940	0.022911	10.76
52	St. Louis	29510 12241	0.112256	0.035603	31.72
85	St. Louis	29510 12351	0.591519	0.528024	89.27
86	St. Louis	29510 12352	0.104872	0.028900	27.56
87	St. Louis	29510 12353	0.259748	0.103413	39.81
111	St. Louis	29510 12461	0.674471	0.042457	6.29
	Totals:		1.955806	0.761308	

For Radius of 1 Mi., Circle Area = 3.141593

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
---	---	---	---	---	---
---	---	---	---	---	---
	Totals:		0.000000	0.000000	

For Radius of .5 Mi., Circle Area = 0.785398

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
---	---	---	---	---	---
---	---	---	---	---	---
	Totals:		0.000000	0.000000	

For Radius of .25 Mi., Circle Area = 0.196350

No	City	Block Group ID	Total Area	Partial Area	% Within Radius
---	---	---	---	---	---
---	---	---	---	---	---
	Totals:		0.000000	0.000000	

========== Site Data ==========

Population:	60391.47
Households:	33773.91
Drilled Wells:	0.00
Dug Wells:	0.00
Other Wells:	0.00

========== Partial (RING) data ==========

---- Within Ring: 4 Mile(s) and 3 Mile(s) ----

Population:	45716.94
Households:	24631.12
Drilled Wells:	0.00
Dug Wells:	0.00
Other Wells:	0.00

** Population On Private Wells: 0.00

---- Within Ring: 3 Mile(s) and 2 Mile(s) ----

Population:	14672.15
Households:	9140.40
Drilled Wells:	0.00
Dug Wells:	0.00
Other Wells:	0.00

** Population On Private Wells: 0.00

---- Within Ring: 2 Mile(s) and 1 Mile(s) ----

Population:	2.37
Households:	2.39
Drilled Wells:	0.00
Dug Wells:	0.00
Other Wells:	0.00

** Population On Private Wells: 0.00

---- Within Ring: 1 Mile(s) and .5 Mile(s) ----

Population:	0.00
Households:	0.00
Drilled Wells:	0.00
Dug Wells:	0.00
Other Wells:	0.00

** Population On Private Wells: Not Applicable

---- Within Ring: .5 Mile(s) and .25 Mile(s) ----

Population:	0.00
Households:	0.00
Drilled Wells:	0.00
Dug Wells:	0.00
Other Wells:	0.00

** Population On Private Wells: Not Applicable

---- Within Ring: .25 Mile(s) and 0 Mile(s) ----

Population:	0.00
Households:	0.00
Drilled Wells:	0.00
Dug Wells:	0.00
Other Wells:	0.00

** Population On Private Wells: Not Applicable

** Total Population On Private Wells: 0.00

APPENDIX H

REMOVAL CRITERIA

THE FOLLOWING FACTORS SHALL BE CONSIDERED IN DETERMINING THE APPROPRIATENESS OF A REMOVAL ACTION

- Actual or potential exposure to nearby human populations, animals, or food chain from hazardous substances or pollutants or contaminants.
- Actual or potential contamination of drinking water supplies or sensitive ecosystems.
- Hazardous substances or pollutants or contaminants in drums, barrels, tanks or other bulk storage containers, that may pose a threat of release.
- High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate.
- Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.
- Threat of fire or explosion.
- The availability of other appropriate federal or state response mechanisms to respond to the release.
- Other situations or factors that may pose threats to public health or welfare or the environment.